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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,861	08/25/2003	Jeff Scott Eder	VM-54	3689
29051	7590	07/02/2004	EXAMINER	
JEFF EDER 19108 30TH DRIVE SE MILL CREEK, WA 98012			GRAHAM, CLEMENT B	
			ART UNIT	PAPER NUMBER

3628

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/647,861

Applicant(s)

EDER, JEFF SCOTT

Examiner

Clement B Graham

Art Unit

3628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a) in no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**  
**Claim Rejections - 35 USC § 102**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-20, are rejected under 35 U.S.C. 102(e) as being anticipated by Eder U.S Patent 6,321,205 .

As per claims 1-2, Eder discloses a computer readable medium having sequences of instructions stored therein, which when executed cause the processors in a computer to perform a discount rate method, comprising:

organizing enterprise related data into the components of value, one or more growth options and two or more elements of value.(see column12 lines 5-25) identifying performance indicators for each element of value.(see column 5 lines 5-35 and column 23 lines 50-65) and determining the discount rate to be used in growth option valuation as a function of the relative ranking of the elements that support the growth option.(see column 11 lines 50-65 and column 12 lines 5-25 and column 10 lines 45-50).

As per claim 3, Eder discloses where the elements of value are vendor relationships, customers, employees, brands, production equipment, strategic partnerships and combinations thereof. (see column 21 lines 5-30).

As per claim 4, Eder discloses wherein the performance indicators are selected from the group consisting of element data and trends, summaries, time lagged values, rates of change, patterns and averages derived from element data.(see column 23 lines 50-65).

As per claim 5, Eder discloses where enterprise related data is obtained from advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems,



payroll systems, purchasing systems, the Internet, user input and combinations thereof.(see column 5 lines 5-35).

As per claim 6, Eder discloses where an enterprise is a single product, a group of products, a division or a company. (see column 5 lines 5-35).

As per claim 7, Eder discloses where the components of value are revenue, expense or change in capital. (see column 23 lines 50-65).

As per claim 8, Eder discloses where performance indicators identify element characteristics that are causal to changes in enterprise value. (see column 23 lines 50-65).

As per claim 9, Eder discloses a discount rate system, comprising:  
a computer with a processor having circuitry to execute instructions; a storage device available to said processor with sequences of instructions stored therein, which when executed cause the processor to:  
organize enterprise related data into the components of value, one or more growth options and two or more elements of value;  
identify performance indicators for each element of value. (see column 5 lines 5-35 and column 23 lines 50-65) and determine the discount rate to be used in growth option valuation as a function of the relative ranking of the elements that support the growth option. (see column 11 lines 50-65 and column 12 lines 5-25 and column 10 lines 45-50).

As per claim 10, Eder discloses where data envelopment analysis (DEA) analysis is used to identify the relative ranking of the elements of value. (see column 23 lines 50-65).

As per claim 11, Eder discloses where the elements of value are vendor relationships, customers, employees, brands, production equipment, strategic partnerships and combinations thereof. (see column 21 lines 5-30).

As per claim 12, Eder discloses wherein the performance indicators are selected from the group consisting of element data and trends, summaries, time lagged values, rates of change, patterns and averages derived from element data. (see column 11 lines 55-65 and column 12 lines 5-25).

As per claim 13, Eder discloses where enterprise related data is obtained from advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, the Internet, user input and combinations thereof. (see column 5 lines 5-35).

As per claim 14, Eder discloses where an enterprise is a single product, a group of products, a division or a company. (see column 5 lines 5-35).

As per claim 15, Eder discloses where the components of value are revenue, expense or change in capital. (see column 23 lines 50-65).

As per claim 16, Eder discloses where performance indicators identify element characteristics that are causal to changes in enterprise value. (see column 23 lines 50-65).

As per claim 17, Eder discloses a valuation method, comprising:  
organizing enterprise related data into the components of value, one or more growth options and two or more elements of value;  
identifying the level of interaction between elements of value. (See column 12 lines 5-25).  
And selecting an element valuation method based on the level of interaction between elements of value. (see column 23 lines 50-65 and column 11 lines 50-65 and column 12 lines 5-25).

As per claim 18, Eder discloses where enterprise related data is obtained from advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, the Internet, user input and combinations thereof. (see column 5 lines 5-35).

As per claim 19, Eder discloses where an enterprise is a single product, a group of products, a division or a company. (see column 5 lines 5-35).

As per claim 20, Eder discloses where here the elements of value are vendor relationships, customers, employees, brands, production equipment, strategic partnerships and combinations thereof. (see column 21 lines 5-30 ). payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, the Internet, user input and combinations thereof.(see column 5 lines 20-35).

#### Conclusion

3. The prior art of record and not relied upon is considered pertinent to Applicants disclosure.

Eder (US 2001/0034686 A 1) teaches method of and system for defining and measuring the real options of a commercial enterprise.

Sandretto (US PATENT: 5, 812, 988) teaches method and system for jointly of estimating cash flows simulated returns risk measures and present values for a plurality of assets.

Horsfall (US Patent 2003/0083973 A1) teaches electronic trading system.

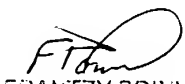
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement B Graham whose telephone number is 703-305-1874. The examiner can normally be reached on 7am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Souh can be reached on 703-308-0505. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-0040 for regular communications and 703-305-0040 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CG

June 21, 2004

  
FRANKY T. TAYLOR  
Au 3628



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,099	08/21/2003	Jeff Scott Eder	VM-55	7276

53787 7590 09/26/2006

ASSET TRUST, INC.  
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EXAMINER

GRAHAM, CLEMENT B

ART UNIT PAPER NUMBER

3628

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/645,099	EDER, JEFF SCOTT	
	Examiner	Art Unit	
	Clement B. Graham	3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2548 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 25-48, are rejected under 35 U.S.C. 102(e) as being anticipated by Sandretto U.S. Patent 5, 812, 988.

As per claim 25, Sandretto discloses a finance method, comprising:  
integrating data from organization transaction databases in accordance with a common schema for an organization with one or more enterprises; and  
developing a model that identifies a net contribution of one or more elements of value to an organization share price by category of value where the categories of value are selected from the group consisting of current operation, real options, market sentiment and combinations thereof by using at least a portion of the data.(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 26, Sandretto discloses where the elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, employee relationships, equipment intellectual property, partnerships, processes, supply chains, vendors, vendor relationships and combinations thereof.(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 27, Sandretto discloses where developing a model that identifies a net contribution of one or more elements of value to an organization share price value by category of value further comprises:  
creating performance indicators for each element of value using at least a portion of the data, training models of historical and forecast data for one or more aspects of financial performance using said indicators to identify value driver candidates by element of value

by enterprise, analyzing historical and forecast data for one or more aspects of financial performance using induction algorithms and said value driver candidates to identify value drivers and create element impact summaries by enterprise, and using said element impact summaries to quantify a contribution of each of one or more elements of value to an organization share price value by category of value by enterprise. (see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 28, Sandretto discloses where the aspects of financial performance are selected from the group consisting of revenue, expense, capital change, market value and combinations thereof. (see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 29, Sandretto discloses where the contribution of an element of value to a category of value is the net contribution of the element to the category of value and the other elements of value. (see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 30, Sandretto discloses further comprises using the organization share price model to complete activities from the group consisting of identifying changes to one or more element value drivers that will optimize one or more aspects of organization financial performance, identifying the impact of value driver changes on one or more aspects of organization financial performance in an interactive manner, reporting organization market and share price value by element of value, reporting organization market and share price value by category of value, identifying a price point for trading organization shares and combinations thereof. (Note abstract see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 31, Sandretto discloses where organization transaction databases are selected from the group consisting of advanced financial system databases, basic financial system databases, alliance management system databases, brand management system databases, business intelligence system databases, customer relationship management system databases, channel management system databases, estimating system databases, intellectual property management system databases, process

management system databases.(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67) supply chain management system databases, vendor management system databases, operation management system databases, enterprise resource planning systems (ERP), material requirement planning systems (MRP), quality control system databases, sales management system databases, human resource system databases, accounts receivable system databases, accounts payable system databases, capital asset system databases, inventory system databases, invoicing system databases, payroll system databases, purchasing system databases, web site system databases, the Internet, external databases, user input and combinations thereof. .(Note abstract and see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 32, Sandretto discloses where a transaction is any event that is logged or recorded. .(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 33, Sandretto discloses a computer readable medium having sequences of instructions stored therein, which when executed cause a processor to perform a learning method, comprising: integrating data from organization transaction databases in accordance with a common schema for an organization with one or more enterprises.(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67) and quantifying a net impact of each of one or more elements of value on a value of a business where the elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, employee relationships, equipment intellectual property, partnerships, processes, supply chains, vendors, vendor relationships and combinations thereof by learning from at least a portion of the data. .(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 34, Sandretto discloses where quantifying a net impact of one or more elements of value on a value of a business further comprises:  
creating performance indicators for each element of value using at least a portion of the data, evolving models of historical and forecast data for one or more aspects of financial



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performance using said indicators to learn which indicators are value driver candidates by enterprise, evolving induction models of historical and forecast data for one or more aspects of enterprise financial performance using said candidates to learn which indicators are value driver candidates while creating element impact summaries from said value drivers, and using said element impact summaries to quantify a contribution of each of one or more elements of value to a value of the business by enterprise.(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 35, Sandretto discloses where the contribution of each of one or more elements of value to a value of a business is segmented by category of value where the categories of value are selected from the group consisting of current operation, real options, market sentiment and combinations thereof. .(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67) As per claim 36, Sandretto discloses where the aspects of financial performance are selected from the group consisting of revenue, expense, capital change, market value and combinations thereof.(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 37, Sandretto discloses where genetic algorithms are used to evolve the models.(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 38, Sandretto discloses where learning from the data further comprises activities selected from the group consisting of identifying previously unknown value drivers, identifying previously unknown relationships between elements of value, identifying previously unknown relationships between element value drivers and combinations thereof. .(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 39, Sandretto discloses where the impact of an element of value on the value of the business is the net impact of the element on the business and the other elements of value. .(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 40, Sandretto discloses where the method further comprises using the net element impact information to support activities from the group consisting of identifying changes to one or more element value drivers that will optimize one or more aspects of organization financial performance, identifying the impact of value driver changes on one or more aspects of organization financial performance in an interactive manner, reporting organization market and share price value by element of value, reporting organization market and share price value by category of value, identifying a price point for trading organization shares and combinations thereof. (see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 41, Sandretto discloses an element system, comprising. networked computers each with a processor having circuitry to execute instructions; a storage device available to each processor with sequences of instructions stored therein, which when executed cause the processors to: use data from organization transaction databases to identify the value of each of one or more elements of value to an organization.(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67)

As per claim 42, Sandretto discloses where the elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, employee relationships, equipment, intellectual property, partnerships, processes, supply chains, vendors, vendor relationships and combinations thereof. .(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 43, Sandretto discloses where an organization is a single product, a group of products, a division, a company, a multi-company corporation or a value chain. .(Note abstract and see column 2 lines 15-59 and column 3-6 and 23 lines 40-65 and column 24-26 lines 1-67 and column 27-28 lines 1-40).

As per claim 44, Sandretto discloses where organization transaction databases are selected from the group consisting of advanced financial system databases, basic financial system databases, alliance management system databases, brand management

system databases, business intelligence system databases, customer relationship management system databases..(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67) channel management system databases, estimating system databases, intellectual property management system databases, process management system databases, supply chain management system databases, vendor management system databases, operation management system databases, enterprise resource planning systems (ERP), material requirement planning systems (MRP), quality control system databases, sales management system databases, human resource system databases, accounts receivable system databases, accounts payable system databases, capital asset system databases, inventory system databases, invoicing system databases, payroll system databases, purchasing system databases, web site system databases, the Internet, external databases, user input and combinations thereof. .(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 45, Sandretto discloses where the value of each of one or more elements of value to an organization is segmented by category of value where the categories of value are selected from the group consisting of current operation, real options, market sentiment and combinations thereof and enterprise where an enterprise is a single product, a group of products, a division or a company. .(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 46, Sandretto discloses where a transaction is any event that is logged or recorded. .(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 47, Sandretto discloses where identifying the value of one or more elements of value to an organization further comprises:  
creating performance indicators for each element of value using at least a portion of the data, training models of historical and forecast data for one or more aspects of financial performance using said indicators to identify value driver candidates by element of value by enterprise .(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39

lines 52-67 and column 40 lines 1-67) analyzing historical and forecast data for one or more aspects of financial performance using induction algorithms and said value driver candidates to identify value drivers and create element impact summaries by enterprise, and using said element impact summaries to quantify a contribution of each of one or more elements of value to an organization value by category of value by enterprise. (see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

As per claim 48, Sandretto discloses where the aspects of financial performance are selected from the group consisting of revenue, expense, capital change, real options, market value and combinations thereof.(see column 14 lines 30-67 and column 15-33 lines 1-67 and column 39 lines 52-67 and column 40 lines 1-67).

### Conclusion

3. The prior art of record and not relied upon is considered pertinent to Applicants disclosure.

Liddy Eder (US Patent 6, 026, 388) teaches user interface and other enhancements for natural language information retrieval system and method.

Kohorn US PATENT: 5, 508, 731) teaches generation of enlarged participatory broadcast audience.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement B Graham whose telephone number is 703-305-1874. The examiner can normally be reached on 7am to 5pm.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement B Graham whose telephone number is 703-305-1874. The examiner can normally be reached on 7am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 703-308-0505. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 703-305-0040 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

<b>Notice of References Cited</b>	Application/Control No. 10/645,099		Applicant(s)/Patent Under Reexamination EDER, JEFF SCOTT	
	Examiner Clement B. Graham		Art Unit 3628	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,812,988	09-1998	Sandretto, Michael J.	705/36R
*	B	US-6,026,388	02-2000	Liddy et al.	707/1
*	C	US-5,508,731	04-1996	Kohorn, Henry V.	725/24
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/645,099

08/21/2003

Jeff Scott Eder

VM-55

7276

53787

7590

02/27/2007

ASSET TRUST, INC.  
2020 MALTBY ROAD  
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EXAMINER

GRAHAM, CLEMENT B

ART UNIT

PAPER NUMBER

3692

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/27/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/645,099

Applicant(s)

EDER, JEFF SCOTT

Examiner

Clement B. Graham

Art Unit

3692

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/1/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 25-40 and 49-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-40 and 49-61 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 41-48 has been cancelled and claims 25-40, and 49-61 remained pending.

#### **Claim Rejections - 35 USC § 101**

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 25, 33, 57, are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Applicant's claims are directed to an algorithm. Specifically, claims 25, 33, 57 recites "integrating data and identifying and generating, creating evolving, ", however these steps are mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, for example) and abstract ideas without a practical application are found to be non-statutory subject matter. Therefore, Applicant's claims are non-statutory as they do not produce a useful, concrete and tangible result.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 25, 33, 57, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In particular, Claims 25, 33, 57, recites the words [" using at least a portion of the data, for each aspect, disparate sources, meta data standard "].

However this language fails to distinctly claim Applicant's invention because the scope of the claim is unclear. Moreover the specification fails to clarify, the meaning of the limitations.

Appropriate correction is required.

#### **Claim Rejections - 35 USC § 102**

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –



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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 25-40, and 49-61, are rejected under 35 U.S.C. 102(b) as being Lyons et al (Hereinafter Lyons U.S. Patent 4, 989, 141).

As per claim 25, Lyons discloses a finance method, comprising:  
integrating data from organization transaction databases in accordance with a common schema for an organization with one or more enterprises; and  
using at least a portion of the data to develop developing a model that identifies a net contribute of one or more elements of value to an organization share price by a category of value and a plurality of tools for organization financial management selected from the group consisting of one or more category of value models one or more component of value models, one or more market value models(see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5) one or more network models one or more optimization models a plurals of segmentation models a plurality of simulation models one or more value chain models, a plurality of management reports, one or more lists of chances that will optimize one or more affects of organization financial performance; a system for automated trading of organization equity security based on a market sentiment value and combinations thereof  
where the categories of value are current operation and a segment of value selected from the group consisting of operation, real options, market sentiment and combinations thereof by using at least a portion of the-data. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 26, Lyons discloses where the an element of value are is selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, employee relationships, equipment intellectual property, partnerships, processes, supply chains, vendors, vendor relationships and combinations thereof. (see

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columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 27, Lyons discloses where developing a model that identifies a net contribution of one or more elements of value to an organization share price value by a category of value further comprises:

creating performance indicators for each element of value using at least a portion of the data, training models of historical and forecast data for one or more aspects of financial performance using said indicators to identify value driver candidates by element of value by enterprise, analyzing historical and forecast data for one or more aspects of financial performance using induction algorithms and said value driver candidates to identify value drivers and create element impact summaries by enterprise, and using said element impact summaries to quantify a contribution of each of one or more elements of value to an organization share price value by category of value by enterprise. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 28, Lyons discloses where the aspects of financial performance are selected from the group consisting of revenue, expense, capital change, market value, alliance value brand value channel value customer values customer relationship value, employee value, employee relationship value, intellectual property, value partnership value, process value, supply chain value vendor value vendor relationship value and combinations thereof. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 29, Lyons discloses where the contribution of an element of value to a category of value is the net contribution of the element of value to the category of value and the other elements of value. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 30, Lyons discloses further comprises using a model that identifies a net contribution of one or more elements of value to an organization share price by a

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,category of value the organization share price by category of value to complete activities selected from the group consisting of identifying changes to one or more element value drivers that will optimize one or more aspects of organization financial performance(see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5) identifying the impact of value driver changes on one or more aspects of organization financial performance in an interactive manner, reporting organization market and share price value by element of value, reporting organization market and share price value by category of value, identifying a price point for trading organization shares and combinations thereof. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 31, Lyons discloses where organization transaction databases are selected from the group consisting of advanced financial system databases, basic financial system databases, alliance management system databases, brand management system databases, business intelligence system databases, customer relationship management system databases, channel management system databases, estimating system databases, intellectual property management system databases, process management system databases, supply chain management system databases, vendor management system databases, operation management system databases, enterprise resource planning systems (ERP) (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5) material requirement planning systems (MRP), quality control system databases, sales management system databases, human resource system databases, accounts receivable system databases, accounts payable system databases, capital asset system databases, inventory system databases, invoicing system databases, payroll system databases, purchasing system databases, web site system databases, the Internet, external databases, user input and combinations thereof. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

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As per claim 32, Lyons discloses where a transaction is any event that is logged or recorded. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 33, Lyons discloses a computer readable medium having sequences of instructions stored therein, which when executed cause a processor in a computer to perform a learning method, comprising:  
integrating data from organization transaction databases in accordance with a common schema for an organization with one or more enterprises; and  
identifying a set of data records that are associated with each of one or more aspects of enterprise financial performance from said integrated data that can be used for training plurality of cluster models for each aspect of enterprise financial performance (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5)  
and generating a plurality of cluster models that identify a plurality of segments for each aspect of financial performance learning from at least a portion of the data where said cluster models when taken together comprise an overall model for each aspect of financial performance and where the aspects of financial performance are selected from the group consisting of category of value, component of value element of value, market value and combinations thereof. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 34, Lyons discloses wherein identifying a plurality of segments for an element of value further comprises:  
creating a plurality of performance indicators for each element of value using at least a portion of the data (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5)  
evolving a plurality of models of historical and forecast data for one or more aspects of financial performance using said indicators to learn which indicators are value driver candidates by enterprise evolving a plurality of induction models of historical and forecast data for one or more aspects of enterprise financial performance using said

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candidates to learn which indicators are value driver candidates while creating a plurality of element impact summaries from said value drivers, and using said element impact summaries to identify a plurality of segments for each element of value with a clustering algorithm. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 35, Lyons discloses where the contribution of each of one or more elements of value to a value of a business is segmented by category of value where the categories of value are selected from the group consisting of current operation, real options, market sentiment and combinations thereof. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 36, Lyons discloses wherein a component of value is selected from the group consisting of revenue, expense, capital change, market value and combinations thereof. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 37, Lyons discloses wherein the method further comprises using genetic algorithms used to evolve the a plurality of models. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 38, Lyons discloses where learning from the data further comprises activities selected from the group consisting of identifying previously unknown value drivers, identifying previously unknown relationships between elements of value, identifying previously unknown relationships between element value drivers and combinations thereof. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 39, Lyons discloses wherein the elements of value are selected from the group consisting of alliances brands, channels, customers, customer relationships, employees employee relationships, equipment intellectual property, partnerships,,

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processes supply, chains, vendors. . vendor relationships and combinations thereof. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 40, Lyons discloses wherein cluster models are developed using algorithms selected from the group consisting of "Kohonen" neural network K-nearest neighbor, Expectation Maximization and\_ the segmental K-means algorithm. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

41 - 48 (cancelled without prejudice)

As per claim 49, Lyons discloses a composite application method for data processing, comprising using two or more independent components of application software to produce one or more useful results by processing a set of data where said data has been integrated from two or more systems in an automated fashion accordance with a common model or schema defined by a common metadata standard. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 50, Lyons discloses wherein two or more independent components of application software can be flexibly combined as required to support the development of one or more useful results. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 51, Lyons discloses wherein a common metadata standard is xml, metadata coalition standard or corba. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 52, Lyons discloses wherein an independent component of application software completes processing selected from the group consisting of: data analysis, attribute derivation, capitalization, causal analysis, classification, clustering, count linkages, data acquisition, data conversion, data storage, data transformation, element life estimation, indicator selection, induction, keyword counting, keyword search, linkage

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location, relative strength determination, statistical learning, valuation, vector generation and combinations thereof. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 53, Lyons discloses wherein one or more useful results are selected from the group consisting of: an element contribution determination, an element impact quantification, an element valuation, an enterprise financial performance analysis, an enterprise financial performance optimization, a keyword location identification, an enterprise financial performance simulation, a future market value optimization, a future market value quantification, a management report production, a real option discount rate calculation, a real option valuation, a share price valuation, an element of value segmentation, a target share price determination, a keyword count and combinations thereof. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 54, Lyons discloses wherein two or more systems are selected from the group consisting of accounts receivable systems, accounts payable systems, advanced financial systems, basic financial systems, alliance management systems, brand management systems (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5) customer relationship management systems, channel management systems, estimating systems, intellectual property management systems, process management systems, supply chain management systems, vendor management systems, operation management systems, sales management systems, human resource systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, web site management systems, the Internet, external databases and combinations thereof. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 55, Lyons discloses wherein a plurality of data are integrated from two or more systems in accordance with a common model or schema defined by a common

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metadata standard using metadata mapping. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 56, Lyons discloses wherein two or more independent components of application software further comprise two or more bots. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 57, Lyons discloses a computer readable medium having sequences of instructions stored therein, which when executed cause the processor in a computer to perform a data method, comprising:

automatically integrating data from a plurality of disparate sources into a common database using a predefined metadata standard that defines a common schema where the plurality of disparate sources further comprise data sources selected from the group consisting of a plurality of database management systems associated with a plurality of transactions systems for one or more commercial enterprises, one or more external databases, an Internet and combinations thereof. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 58, Lyons discloses wherein a plurality of data from a plurality of disparate data sources are automatically integrated into a common database using metadata mapping. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 59, Lyons discloses wherein a plurality of enterprise transactions systems are selected from the group consisting of accounts receivable systems, accounts payable systems, advanced financial systems, basic financial systems, alliance management systems, brand management systems, customer relationship management systems (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5) channel management systems, estimating systems, intellectual property



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management systems, process management systems, supply chain management systems, vendor management systems, operation management systems, sales management systems, human resource systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, web site management systems and combinations thereof. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 60, Lyons discloses wherein the method further comprises performing a search for one or more keywords and making a set of results from said search available. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

As per claim 61, Lyons discloses wherein a keyword further comprises a word selected from a category consisting of company name, brand name, trademark and combinations thereof. (see columns 5-11 column 7 line 1 to column 9 line 17 and column 9 lines 8-12 and column 10 lines 1-15 and column 21-22 and column 5-6 and column 4-5).

### **Conclusion**

#### **RESPONSE TO ARGUMENTS**

7. Applicant's argument filed 12/1/06 has been fully considered but they are moot in view of new grounds of rejections.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement B Graham whose telephone number is 703-305-1874. The examiner can normally be reached on 7am to 5pm.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement B Graham whose telephone number is 703-305-1874. The examiner can normally be reached on 7am to 5pm.

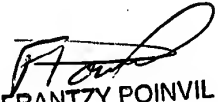
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 703-308-0505. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 703-305-0040 for After Final communications.

Art Unit: 3692

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CG

February 17, 2007

  
FRANTZY POINVIL  
PRIMARY EXAMINER  
*AU 3692*

<b>Notice of References Cited</b>	Application/Control No. 10/645,099	Applicant(s)/Patent Under Reexamination EDER, JEFF SCOTT	
	Examiner Clement B. Graham	Art Unit 3692	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-4,989,141	01-1991	Lyons et al.	705/36R
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

**Search Notes**

Application/Control No.

10/645,099

Examiner

Clement B. Graham

Applicant(s)/Patent under  
Reexamination

EDER, JEFF SCOTT

Art Unit

3692

**SEARCHED**

Class	Subclass	Date	Examiner
705	37	2/15/2007	CG
705	36	2/16/2007	CG
705	38	2/17/2007	CG

**INTERFERENCE SEARCHED**

Class	Subclass	Date	Examiner

**SEARCH NOTES  
(INCLUDING SEARCH STRATEGY)**

	DATE	EXMR
See attached west search notes	2/17/2006	CG

# Office Action Summary

Application No.

10/645,099

Applicant(s)

EDER, JEFF SCOTT

Examiner

Clement B. Graham

Art Unit

3692

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10/3/07.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 25-40 and 49-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-40 and 49-61 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 25-40, 49-61 remained pending.
2. In view of the Appeal Brief filed on 10/03/2007 PROSECUTION IS HEREBY REOPENED. New grounds of rejections are set forth below.  
To avoid abandonment of the application, appellant must exercise one of the following two options:  
(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,  
(2) request reinstatement of the appeal.  
If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

#### Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:  
Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.  
Claims 25, 33, 57, are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.  
Applicant's claims are directed to an algorithm. Specifically, claims 25, 33, 57 recites "integrating data and identifying and generating, creating evolving, ", however these steps are mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, for example) and abstract ideas without a practical application are found to be non-statutory subject matter. Therefore, Applicant's claims are non-statutory as they do not produce a useful, concrete and tangible result.

#### Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 25, 33, 57, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In particular, Claims 25, 33, 57, recites the words [“ using at least a portion of the data, for each aspect, disparate sources, meta data standard ”].

However this language fails to distinctly claim Applicant's invention because the scope of the claim is unclear. Moreover the specification fails to clarify, the meaning of the limitations.

Appropriate correction is required.

#### **Claim Rejections - 35 USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patent ability shall not be negatived by the manner in which the invention was made.

7. Claims 25-40, 49-61, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellard U.S. Patent 5, 991, 758 in view of Abelow U.S. Patent 5, 999, 908.

As per claim 25, Ellard discloses a finance method, comprising:  
integrating data from organization transaction databases in accordance with a common schema for an organization with one or more enterprises; (see column 17 lines 20-34).  
Ellard fail to explicitly teach using at least a portion of the data to develop developing a model that identifies a net contribute of one or more elements of value to an organization share price by a category of value and a plurality of tools for organization financial management selected from the group consisting of one or more category of value models one or more component of value models, one or more market value models one or more network models one or more optimization models a plurals of segmentation models a plurality of simulation models one or more value chain models, a plurality of management reports, one or more lists of chances that will optimize one or more affects of organization financial performance; a system for automated trading of organization equity security based on a market sentiment value and combinations thereof where the categories of value are current operation and a segment of value selected from the group consisting of operation, real options, market sentiment and combinations thereof by using at least a portion of the-data.

However Abelow discloses for one example, FIG. 22 illustrates the expected learning curve for one product feature and the corresponding match of types of questions. A counter is incremented at each occurrence of that same trigger (which may be using a particular product feature, exiting an important new product feature without using it, accessing any one of a set of related but infrequently used features, etc.). The actual triggers occur at specific instances when both the trigger increments the counter, and that counter reaches specific values. At each of those specific values, a different trigger is fired and each are independent of the others (such as on the 2nd, 10th, 70th and 95th use of a feature), as follows.(note abstract and see column 29 lines 28-67 and column 30 lines 1-5).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Ellard to include using at least a portion of the data to develop developing a model that identifies a net contribute of one or more elements of value to an organization share price by a category of value and a plurality of tools for organization financial management selected from the group consisting of one or more category of value models one or more component of value models, one or more market value models one or more network models one or more optimization models a plurals of segmentation models a plurality of simulation models one or more value chain models, a plurality of management reports, one or more lists of chances that will optimize one or more affects of organization financial performance; a system for automated trading of organization equity security based on a market sentiment value and combinations thereof where the categories of value are current operation and a segment of value selected from the group consisting of operation, real options, market sentiment and combinations thereof by using at least a portion of the-data taught by Abelow in order to develop or construct modules that is built in to certain products and services.

As per claim 26, Lyons discloses where the an element of value are is selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, employee relationships, equipment intellectual property, partnerships,



processes, supply chains, vendors, vendor relationships and combinations thereof. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 27, Lyons discloses where developing a model that identifies a net contribution of one or more elements of value to an organization share price value by a category of value further comprises:  
creating performance indicators for each element of value using at least a portion of the data, training models of historical and forecast data for one or more aspects of financial performance using said indicators to identify value driver candidates by element of value by enterprise, analyzing historical and forecast data for one or more aspects of financial performance using induction algorithms and said value driver candidates to identify value drivers and create element impact summaries by enterprise, and using said element impact summaries to quantify a contribution of each of one or more elements of value to an organization share price value by category of value by enterprise. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 28, Lyons discloses where the aspects of financial performance are selected from the group consisting of revenue, expense, capital change, market value, alliance value brand value channel value customer values customer relationship value, employee value, employee relationship value, intellectual property, value partnership value, process value, supply chain value vendor value vendor relationship value and combinations thereof. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 29, Lyons discloses where the contribution of an element of value to a category of value is the net contribution of the element of value to the category of value and the other elements of value. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 30, Lyons discloses further comprises using a model that identifies a net contribution of one or more elements of value to an organization share price by a ,category of value the organization share price by category of value to complete activities selected from the group consisting of identifying changes to one or more

element value drivers that will optimize one or more aspects of organization financial performance (see column 17 lines 20-34 and columns 4-6 lines 1-67) identifying the impact of value driver changes on one or more aspects of organization financial performance in an interactive manner, reporting organization market and share price value by element of value, reporting organization market and share price value by category of value, identifying a price point for trading organization shares and combinations thereof. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 31, Lyons discloses where organization transaction databases are selected from the group consisting of advanced financial system databases, basic financial system databases, alliance management system databases, brand management system databases, business intelligence system databases, customer relationship management system databases, channel management system databases, estimating system databases, intellectual property management system databases, process management system databases, supply chain management system databases, vendor management system databases, operation management system databases, enterprise resource planning systems (ERP) (see column 17 lines 20-34 and columns 4-6 lines 1-67) material requirement planning systems (MRP), quality control system databases, sales management system databases, human resource system databases, accounts receivable system databases, accounts payable system databases, capital asset system databases, inventory system databases, invoicing system databases, payroll system databases, purchasing system databases, web site system databases, the Internet, external databases, user input and combinations thereof. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 32, Lyons discloses where a transaction is any event that is logged or recorded. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 33, Lyons discloses a computer readable medium having sequences of instructions stored therein, which when executed cause a processor in a computer to perform a learning method, comprising:

integrating data from organization transaction databases in accordance with a common schema for an organization with one or more enterprises and identifying a set of data records that are associated with each of one or more aspects of enterprise financial performance from said integrated data that can be used for training plurality of cluster models for each aspect of enterprise financial performance (see column 17 lines 20-34 and columns 4-6 lines 1-67).

Ellard fail to explicitly teach generating a plurality of cluster models that identify a plurality of segments for each aspect of financial performance learning from at least a portion of the data where said cluster models when taken together comprise an overall model for each aspect of financial performance and where the aspects of financial performance are selected from the group consisting of category of value, component of value element of value, market value and combinations thereof.

However Abelow discloses for one example, FIG. 22 illustrates the expected learning curve for one product feature and the corresponding match of types of questions. A counter is incremented at each occurrence of that same trigger (which may be using a particular product feature, exiting an important new product feature without using it, accessing any one of a set of related but infrequently used features, etc.). The actual triggers occur at specific instances when both the trigger increments the counter, and that counter reaches specific values. At each of those specific values, a different trigger is fired and each are independent of the others (such as on the 2nd, 10th, 70th and 95th use of a feature), as follows.(note abstract and see column 29 lines 28-67 and column 30 lines 1-5).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Ellard to include generating a plurality of cluster models that identify a plurality of segments for each aspect of financial performance learning from at least a portion of the data where said cluster models when taken together comprise an overall model for each aspect of financial performance and where the aspects of financial performance are selected from the group consisting of category of value, component of value element of value, market value and combinations

thereof taught by Abelow in order to develop or construct modules that is built in to certain products and services.

As per claim 34, Lyons discloses wherein identifying a plurality of segments for an element of value further comprises:  
creating a plurality of performance indicators for each element of value using at least a portion of the data (see column 17 lines 20-34 and columns 4-6 lines 1-67)  
evolving a plurality of models of historical and forecast data for one or more aspects of financial performance using said indicators to learn which indicators are value driver candidates by enterprise evolving a plurality of induction models of historical and forecast data for one or more aspects of enterprise financial performance using said candidates to learn which indicators are value driver candidates while creating a plurality of element impact summaries from said value drivers, and  
using said element impact summaries to identify a plurality of segments for each element of value with a clustering algorithm. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 35, Lyons discloses where the contribution of each of one or more elements of value to a value of a business is segmented by category of value where the categories of value are selected from the group consisting of current operation, real options, market sentiment and combinations thereof. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 36, Lyons discloses wherein are component of value is selected from the group consisting of revenue, expense, capital change; market value and combinations thereof. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 37, Lyons discloses wherein the method further comprises using genetic algorithms used to evolve the a plurality of models. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 38, Lyons discloses where learning from the data further comprises activities selected from the group consisting of identifying previously unknown value drivers, identifying previously unknown relationships between elements of value,

identifying previously unknown relationships between element value drivers and combinations thereof. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 39, Lyons discloses wherein the elements of value are selected from the group consisting\_ of alliances brands, channels, customers, customer relationships, employees employee relationships, equipment intellectual property, partnerships,, processes supply, chains, vendors. . vendor relationships and combinations thereof. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 40, Lyons discloses wherein cluster models are developed using algorithms selected from the group consisting of "Kohonen" neural network K-nearest neighbor, Expectation Maximization and\_ the segmental K-means algorithm. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 49, Lyons discloses a composite application method for data processing, comprising using two or more independent components of application software to produce one or more useful results by processing a set of data where said data has been integrated from two or more systems in an automated fashion accordance with a common model or schema defined by a common metadata standard. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 50, Lyons discloses wherein two or more independent components of application software can be flexibly combined as required to support the development of one or more useful results. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 51, Lyons discloses wherein a common metadata standard is xml, metadata coalition standard or corba. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 52, Lyons discloses wherein an independent component of application software completes processing selected from the group consisting of: data analysis, attribute derivation, capitalization, causal analysis, classification, clustering, count linkages, data acquisition, data conversion, data storage, data transformation, element life estimation, indicator selection, induction, keyword counting, keyword search, linkage

location, relative strength determination, statistical learning, valuation, vector generation and combinations thereof. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 53, Lyons discloses wherein one or more useful results are selected from the group consisting of: an element contribution determination, an element impact quantification, an element valuation, an enterprise financial performance analysis, an enterprise financial performance optimization, a keyword location identification, an enterprise financial performance simulation, a future market value optimization, a future market value quantification, a management report production, a real option discount rate calculation, a real option valuation, a share price valuation, an element of value segmentation, a target share price determination, a keyword count and combinations thereof. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 54, Lyons discloses wherein two or more systems are selected from the group consisting of accounts receivable systems, accounts payable systems, advanced financial systems, basic financial systems, alliance management systems, brand management systems (see column 17 lines 20-34 and columns 4-6 lines 1-67), customer relationship management systems, channel management systems, estimating systems, intellectual property management systems, process management systems, supply chain management systems, vendor management systems, operation management systems, sales management systems, human resource systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, web site management systems, the Internet, external databases and combinations thereof. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 55, Lyons discloses wherein a plurality of data are integrated from two or more systems in accordance with a common model or schema defined by a common metadata standard using metadata mapping. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 56, Lyons discloses wherein two or more independent components of application software further comprise two or more bots. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 57, Lyons discloses a computer readable medium having sequences of instructions stored therein, which when executed cause the processor in a computer to perform a data method, comprising:

automatically integrating data from a plurality of disparate sources into a common database using a predefined metadata standard that defines a common schema (see column 17 lines 20-34 and columns 4-6 lines 1-67).

Ellard fail to explicitly teach where the plurality of disparate sources further comprise data sources selected from the group consisting of a plurality of database management systems associated with a plurality of transactions systems for one or more commercial enterprises, one or more external databases, an Internet and combinations thereof. However Abelow discloses for one example, FIG. 22 illustrates the expected learning curve for one product feature and the corresponding match of types of questions. A counter is incremented at each occurrence of that same trigger (which may be using a particular product feature, exiting an important new product feature without using it, accessing any one of a set of related but infrequently used features, etc.). The actual triggers occur at specific instances when both the trigger increments the counter, and that counter reaches specific values. At each of those specific values, a different trigger is fired and each are independent of the others (such as on the 2nd, 10th, 70th and 95th use of a feature), as follows.(note abstract and see column 29 lines 28-67 and column 30 lines 1-5).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Ellard to include where the plurality of disparate sources further comprise data sources selected from the group consisting of a plurality of database management systems associated with a plurality of transactions systems for one or more commercial enterprises, one or more external databases, an

Internet and combinations thereof taught by Abelow in order to develop or construct modules that is built in to certain products and services.

As per claim 58, Lyons discloses wherein a plurality of data from a plurality of disparate data sources are automatically integrated into a common database using metadata mapping. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 59, Lyons discloses wherein a plurality of enterprise transactions systems are selected from the group consisting of accounts receivable systems, accounts payable systems, advanced financial systems, basic financial systems, alliance management systems, brand management systems, customer relationship management systems (see column 17 lines 20-34 and columns 4-6 lines 1-67) channel management systems, estimating systems, intellectual property management systems, process management systems, supply chain management systems, vendor management systems, operation management systems, sales management systems, human resource systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, web site management systems and combinations thereof. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 60, Lyons discloses wherein the method further comprises performing a search for one or more keywords and making a set of results from said search available. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

As per claim 61, Lyons discloses wherein a keyword further comprises a word selected from a category consisting of company name, brand name, trademark and combinations thereof. (see column 17 lines 20-34 and columns 4-6 lines 1-67).

#### Conclusion

#### RESPONSE TO ARGUMENTS

8. Applicant's argument filed 10/3/07 has been fully considered but they are moot in view of new grounds of rejections.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement B Graham whose telephone number is 571-272-6795. The examiner can normally be reached on 7am to 5pm.



Application/Control Number:  
10/645,099  
Art Unit: 3692

Page 13

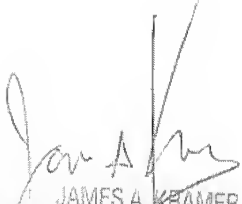
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement B Graham whose telephone number is 703-305-1874. The examiner can normally be reached on 7am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdí can be reached on 571-272-6702. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 703-305-0040 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CG

JAN 2, 2008

  
JAMES A. KRAMER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

<b>Notice of References Cited</b>	Application/Control No. 10/645,099	Applicant(s)/Patent Under Reexamination EDER, JEFF SCOTT	
	Examiner Clement B. Graham	Art Unit 3692	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,991,758	11-1999	Ellard, Scott	707/6
*	B	US-5,999,908	12-1999	Abelow, Daniel H.	705/1
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a))  
 Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,616	12/22/2003	Jeff Scott Eder	AR - 61	8217

53787 7590 02/06/2007  
ASSET TRUST, INC.  
2020 MALTBY ROAD  
SUITE 7362  
BOTHELL, WA 98021

EXAMINER

LIVERSEGE, JENNIFER L

ART UNIT PAPER NUMBER

3692

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/06/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/743,616		EDER, JEFF SCOTT	
	<b>Examiner</b>		<b>Art Unit</b>	
	Jennifer Liversedge		3692	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 64-96 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 64-96 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u>                                    | 6) <input type="checkbox"/> Other: _____                          |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :12/22/2003, 1/10/2005, 5/10/2005, 7/5/2005, 9/4/2005, 2/18/2006.

## **DETAILED ACTION**

### ***Response to Amendment***

This Office Action is responsive to Applicant's preliminary amendment of application 10/743,616 filed on April 18, 2005.

The amendment contains new claims: 64-96.

Claims 1-63 have been canceled.

### ***Information Disclosure Statement***

The references submitted in the IDS form for this application have been considered, but a cursory review was provided given the voluminous nature of references.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 64-69, 71-73, 75-80, 82-84, 86-91 and 93-95 are rejected under 35 U.S.C. 102(b) as being anticipated by "How to sort out the premium drivers of post-deal value" by Daniel W. Bielinski (further referred to as Bielinski).

Regarding claims 64, 75 and 86, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus (pages 1-5), comprising:

Preparing transaction data related to a commercial enterprise for use in processing, developing a computational model of enterprise market value by element and segment of value by completing a series of multivariate analyses that utilize at least a portion of said data (pages 1-5), and

Completing activities selected from the group consisting of: determining an element of value contribution, quantifying an element of value impact on enterprise financial performance, completing an analysis of enterprise financial performance, optimizing one or more aspects of enterprise financial performance, simulating an enterprise financial performance, optimizing a future enterprise market value, quantifying a future enterprise market value, creating a management report, valuing an enterprise market sentiment, calculating a real option discount rate, valuing a real option, valuing a share of enterprise stock, determining a target share price and combinations thereof (pages 1-5).

Regarding claims 65, 76 and 87, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus where the segments of value are selected from the group consisting of current operation, market sentiment, real option and combinations thereof (pages 2-3 and 5).

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Regarding claims 66, 77 and 88, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus where the elements of value are selected from the group consisting of alliances, brands, channels, customer relationships, employees, employee relationships, intellectual capital, intellectual property, partnerships, processes, production equipment, vendors, vendor relationships and combinations thereof (pages 2-4).

Regarding claims 67, 78 and 89, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus where preparing data for use in processing further comprises integrating data from a plurality of enterprise related systems in accordance with a common schema (pages 1-5).

Regarding claims 68, 79 and 90, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus where financial performance optimization further comprises identifying value driver changes that will optimize one or more aspects of financial performance where said aspects of financial performance are selected from the group consisting of revenue, expense, capital change, cash flow, current operation value, real option value, derivative value, future market value, market sentiment value, market value and combinations thereof (pages 1-5).



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Regarding claims 69, 80 and 91, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus wherein a series of multivariate analyses are selected from the group consisting of identifying one or more previously unknown item performance indicators, discovering one or more previously unknown value drivers, identifying one or more previously unknown relationships between one or more value drivers, identifying one or more previously unknown relationships between one or more elements of value, quantifying one or more inter-relationships between value drivers, quantifying one or more impacts between elements of value, developing one or more composite variables, developing one or more vectors, developing one or more causal element impact summaries, identifying a best fit combination of predictive model algorithm and element impact summaries for modeling enterprise market value and each of the components of value, determining a net element of value impact for each segment of value, determining a relative strength of a plurality of elements of value between two or more enterprises, developing one or more real option discount rates, calculating one or more real option values, calculating an enterprise market sentiment value by element of value, and combinations thereof (pages 1-5).

Regarding claims 71, 82 and 93, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus wherein enterprise related transaction data are obtained from systems selected from the group consisting of advanced financial systems, basic financial systems, alliance management systems,

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brand management systems, customer relationship management systems, channel management systems, estimating systems, intellectual property management systems, process management systems, supply chain management systems, vendor management systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, web site systems, the Internet, external databases and combinations thereof (pages 1-5).

Regarding claims 72, 83 and 94, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus wherein an enterprise further comprises a single product, a group of products, a division or an entire company (pages 1-5).

Regarding claim 73, 84 and 95, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus wherein the model of enterprise market value further comprises a combination of models selected from the group consisting of a predictive component of value model, a real option discount rate model, a real option valuation model, a derivative valuation model, an excess financial asset valuation model, a market sentiment model by element of value and combinations thereof (pages 1-5).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 70, 81, 92, 74, 85 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bielinski, and further in view of "Machine-learning research: Four current directions" by Thomas G. Deitterich (further referred to as Deitterich).

Regarding claims 70, 81 and 92, Bielinski does not disclose an enterprise management method, program storage device with instructions and apparatus wherein a predictive model algorithm is selected from the group consisting of neural network; classification and regression tree; generalized autoregressive conditional heteroskedasticity; regression; generalized additive; redundant regression network;

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rough-set analysis; Bayesian; multivariate adaptive regression spline and support vector method.

However, Deitterich discloses an enterprise management method, program storage device with instructions and apparatus wherein a predictive model algorithm is selected from the group consisting of neural network; classification and regression tree; generalized autoregressive conditional heteroskedasticity; regression; generalized additive; redundant regression network; rough-set analysis; Bayesian; multivariate adaptive regression spline and support vector method (pages 1-39).

It would be obvious to one of ordinary skill in the art to modify the computerized models for determining valuation by using multiple value drivers as disclosed by Kielinski to adapt the use of the model algorithms as disclosed by Deitterich. The motivation would be to use an algorithm from among the many known algorithms for performing computations.

Regarding claims 74, 85 and 96, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus where genetic algorithms are used to identify changes that will optimize one or more aspects of enterprise financial performance and multi-criteria optimization models are used to identify the changes that will optimize two or more aspects of enterprise financial performance (pages 1-5).

Bielinski does not disclose an enterprise management method, program storage device with instructions and apparatus where a Markov Chain Monte Carlo model is

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used to identify one or more changes that will optimize one aspect of enterprise financial performance. However, Dietterich discloses the use of a Markov Chain Monte Carlo model for optimization (pages 5-6). It would be obvious to one of ordinary skill in the art to modify the computerized models for determining valuation by using multiple value drivers as disclosed by Kielinski to adapt the use of the Markov Chain Monte Carlo model as disclosed by Deitterich. The motivation would be to use a model which is used with neural networks for performing combinatorial optimization computations.

### ***Conclusion***

Any inquiry concerning this communication should be directed to Jennifer Liversedge whose telephone number is 571-272-3167. The examiner can normally be reached on Monday – Friday, 8:30 – 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached at 571-272-6777. The fax number for the organization where the application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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Jennifer Liversedge

Examiner

Art Unit 3692



RICHARD E. CHILCOT, JR.  
SUPERVISORY PATENT EXAMINER

JUL 05 2005

PTO/SB/08A (04-03)

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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**Complete if Known**

Application Number	10/743,616
Filing Date	12/22/2003
First Named Inventor	Jeff S. Eder
Art Unit	3624
Examiner Name	
Attorney Docket Number	VM - 61

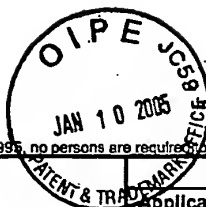
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Sheet

of

Application Number

10/743,616

Filing Date

12/22/2003

First Named Inventor

Jeff S. Eder

Art Unit

3624

Examiner Name

Attorney Docket Number

VM - 61

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
JL		KOLLER, TIMOTHY, "What is value based management", McKinsey Quarterly, 1994, Number 3	
JL		BROWN, CAROL; COAKLEY, JAMES; PHILLIPS, MARY ELLEN, "Neural Networks Enter World of Mgmt Accounting,	
JL		BIELINSKI, DANIEL, "How to sort out the premium drivers of post deal value", Mergers & Acquisitions,	
JL		BERGSTROM, PETER; KIMBER ELIOT, "Formal data models for SGML and HyTime", SGML, March 1999, electrum	
JL		HAROLD, ELLIOTTE, XML Bible, IDG Books, 1999	
JL		KNIGHT, JAMES, Value Based Management, McGraw Hill, 1998	
JL		NeuroSolutions, Application Summaries	
JL		COPELAND, TOM, KOLLER, TIM, MURRIN, JACK, Valuation, John Wiley and Sons, 1994	
JL		BROWN, CAROLYN, PHILLIPS, MARY ELLEN, Expert Systems for Management Accounting Tasks, IMA Foundation	

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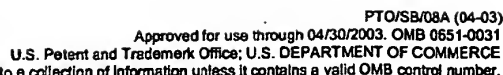
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Application Number	10/743,616
Filing Date	12/22/2003
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Art Unit	3624
Examiner Name	
Attorney Docket Number	VM - 61

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		Filing Date	12/22/2003	
		First Named Inventor	Jeff S. Eder	
		Art Unit	3624	
		Examiner Name		
Sheet		of	Attorney Docket Number	AR - 61

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JL		CAQUETTE, JOHN, ALTMAN, EDWARD & NARAYANAN, PAUL, Managing Credit Risk, 1998, John Wiley and Sons	
JL		LOHR, STEVE, "Gates tries to inspire future techies", International Herald Tribune, March 2, 2004	

Examiner Signature	<i>Jeff Eder</i>	Date Considered	1/25/2007
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		Filing Date	12/22/2003	
		First Named Inventor	Jeff S. Eder	
		Art Unit	3624	
		Examiner Name		
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JL		Chicago Board of Trade, "SPAN Margin System", 8/27/1991	
JL		Chicago Mercantile Exchange, "SPAN - Frequently Asked Questions", CME web site, 2/17/2008	

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**Complete if Known**

Application Number	10/743.616
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Filing Date	12/22/2003
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First Named Inventor	Jeff S. Eder
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Art Unit	3624
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Attorney Docket Number	VM - 61
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JL		Barua, Anitesh; Lee, C.H. Sophie; Whinston, Andrew, "The Calculus of Reengineering", August 1994	
JL		Haesendonckx, Michel, "VBM - Value Driver Tree", June 8, 2005	
JL		Chambers, Robert; Quiggins, John; "Resource Allocation and Asset Pricing", November 2002	

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JL		Culp, Christopher et al, "Value at Risk for Asset Managers", Derivatives Quarterly, Vol 5, 01/8/99	
JL		MAIER, DAVID, "Database Desiderata for an XML Query Language"; W3.org, 1990	
JL		WIDOM, JENNIFER, "Data Management for XML, Research Directions", IEEE, July 1999	
JL		W3C, "Extensible Markup Language (XML)", W3C web site, 4/14/2005	
JL		GOLDFARB, CHARLES; & PRESCOD, PAUL; XML Handbook; Prentice Hall, 1998	

Examiner Signature		Date Considered	1/27/2007
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 1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.  
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PTO/SDR/080 (06-03)

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Substitute for form 1449/PTO		<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	10/743,616	
		Filing Date	12/22/2003	
		First Named Inventor	Jeff S. Eder	
		Art Unit	3624	
		Examiner Name		
Sheet		of	Attorney Docket Number	AR - 61

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
JL		Chicago Board of Trade, "SPAN Margin System", 8/27/1991	
JL		Chicago Mercantile Exchange, "SPAN - Frequently Asked Questions", CME web site, 2/17/2006	

Examiner Signature	<i>JL Kelly</i>	Date Considered	1/27/2007
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		Application Number	10/743,616
		Filing Date	12/22/2003
		First Named Inventor	Jeff S. Eder
		Art Unit	3624
Examiner Name			
Attorney Docket Number	AR - 61		
Sheet		of	

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JL		Barua, Anitesh; Lee, C.H. Sophie; Whinston, Andrew, "The Calculus of Reengineering", August 1994	
JL		Haesendonckx, Michel, "VBM - Value Driver Tree", June 8, 2005	
JL		Chambers, Robert; Quiggins, John; "Resource Allocation and Asset Pricing", November 2002	

Examiner Signature	<i>[Signature]</i>	Date Considered	1/27/2007
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Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

of

**Complete if Known**

Application Number	10/743.616
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Filing Date	12/22/2003
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First Named Inventor	Jeff S. Eder
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Art Unit	3624
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Examiner Name \_\_\_\_\_

Attorney Docket Number	AR - 61
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## U. S. PATENT DOCUMENTS

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PTO/SB/088 (08-03)

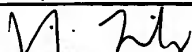
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Substitute for form 1449/PTO		<b>Complete If Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	10/743,616	
		Filing Date	12/22/2003	
		First Named Inventor	Jeff S. Eder	
		Art Unit	3624	
		Examiner Name		
Sheet		of	Attorney Docket Number	AR - 61

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
JL		CAQUETTE, JOHN, ALTMAN, EDWARD & NARAYANAN, PAUL, Managing Credit Risk, 1998, John Wiley and Sons	
JL		LOHR, STEVE, "Gates tries to inspire future techies", International Herald Tribune, March 2, 2004	

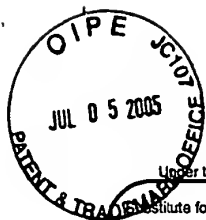
Examiner Signature		Date Considered	1/27/2007
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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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**Complete if Known**

Application Number	10/743,616
Filing Date	12/22/2003
First Named Inventor	Jeff S. Eder
Art Unit	3624
Examiner Name	
Attorney Docket Number	VM - 61

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JL		CAOQUETTE, JOHN, ALTMAN, EDWARD & NARAYANAN, PAUL, Managing Credit Risk, John Wiley and Sons, Inc.	

Examiner Signature		Date Considered	1/27/2007
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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Application Number	10/743,616
Filing Date	12/22/2003
First Named Inventor	Jeff S. Eder
Art Unit	3624
Examiner Name	
Attorney Docket Number	VM - 61

Sheet

of

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JE		Anonymous, "Survey: Too Clever by Half", The Economist, January 24, 2004	

Examiner Signature	<i>JE</i>	Date Considered	4/21/2007
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**INFORMATION DISCLOSURE  
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Sheet 1 of 8

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Application Number	
Filing Date	12-22-2002
First Named Inventor	Jeff S. Eder
Art Unit	
Examiner Name	
Attorney Docket Number	VM - 61

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
JL		US- 5,224,034	06-29-1993	Katz, Paul	
		US- 5,237,946	08-17-1993	Kagami, Akari	
		US- 5,128,861	07-07-1992	Kagami, Akari	
		US- 5,237,495	08-17-1993	Morii, Hideki	
		US- 3,749,892	07-31-1973	Stenning, Patrick	
		US- 5,361,201	11-01-1994	Jost, Allen et al	
		US- 3,933,305	01-20-1976	Murphy, John Michael	
		US- 4,989,141	01-29-1991	Lyons, Richard	
		US- 5,317,504	05-31-1994	Nakayama, Mamoru	
		US- 5,414,621	05-09-1995	Hough, John	
		US- 5,193,055	03-09-1993	Brown, Gordon	
		US- 5,809,282	09-15-1998	Cooper, Dennis	
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		US- 5,737,581	04-07-1998	Keane, John	
		US- 5,812,988	09-22-1998	Sandretto, Michael	
		US- 6,125,355	09-26-2000	Bekaert, Geert	
		US- 6,173,276	01-19-2001	Kant, Elain	
		US- 6,112,188	08-29-2000	Hamett, William	
		US- 6,134,536	10-17-2000	Shepherd, Ian	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>5</sup>
		Country Code <sup>2</sup> *Number <sup>3</sup> *7nd Code <sup>4</sup> (if known)				

Examiner Signature	<i>JA</i>	Date Considered	1/25/2007
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Sheet	2	of	8
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**Complete if Known**

Application Number	
Filing Date	12/22/2003
First Named Inventor	Jeff S. Eder
Art Unit	
Examiner Name	
Attorney Docket Number	VM-61

## U. S. PATENT DOCUMENTS

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**FOREIGN PATENT DOCUMENTS**

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Substitute for form 1449/PTO		<b>Compl to If Known</b>	
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		Filing Dat	12/22/2003
		First Named Inventor	Jeff S. Eder
		Art Unit	
		Examiner Name	
Sheet 3	of 8	Attorney Docket Number	VM - 61

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JL	1	ZIPP, ALAN S.; Business valuation methods; 1993, AICPA	
JL	2	DAVIDOW, WILLIAM; Accounting systems are completely wrong, January 1995, Red Herring	
JL	3	MCTAGGERT, JAMES, KONTES, PETER AND MANKINS, MICHAEL, The value imperative, 1994, The Free Press	
JL	4	RAPPAPORT, ALFRED; Creating shareholder value; 1986, The Free Press	
JL	5	RITCHKEN, PETER, Options, Theory, Strategy and Applications, 1987, Foresman and Company	
JL	6	DIXIT, AVINASH & PINDYCK, ROBERT; Investment under uncertainty; 1994; Princeton University Press	
JL	7	GARSON, DAVID; Interpreting neural network connection weights, 4/1/1991, AI Expert	
JL	8	WELLSTEAD, STEPHEN; Neural network and fuzzy logic applications in C/C++; 1994; John Wiley & Sons	
JL	9	MOST, KENNETH; Accounting theory; 1977, Grid, Inc.	
JL	10	HENDRIKSEN, ELDEN, Accounting theory, 1982, Richard D. Irwin	

Examiner Signature	<i>[Signature]</i>	Date Considered	1/25/2007
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**Abstract (Document Summary)**

Value-based management (VBM) represents one of the latest advancements in discounted cash flow (DCF) modeling that is available to acquirers. VBM centers on what specific steps can be taken operationally and strategically to add value to a target after the deal is signed. It is based on the target's historical performance, rather than projections, and can show how the record might have been changed had managerial decisions and operating environments been different. Sensitivity analysis of past results offers clues to what can be done in the future and which value drivers should receive the most attention to achieve optimal rewards. The VBM technique allows the analyst to figure key decisionmaking trade-offs, since attention to one driver may generate negative effects on others or 2 or more drivers may have to be varied in concert to produce the best results.

**Full Text (2640 words)***Copyright Investment Dealers' Digest, Inc. Jul/Aug 1993*

Many m&a professionals use a variety of computerized models to estimate the value of a company and guide them in setting purchase prices. However, relatively few buyers take advantage of the capabilities of these models to enhance their due diligence and formulate strategies for increasing the cash flow and enhancing the value of their acquired targets. Even fewer sellers use these models to help maximize the cash flows and values of their companies before putting their firms up for sale. Utilizing valuation tools solely to price companies is not unlike using a Ferrari to drive only to and from work -- a legitimate but limited use that ignores powerful potential. Indeed, as the art of modeling has progressed, new methodologies have been developed and applied to actual transactions in the ma market to sharply widen the utility and versatility of computer-based valuation approaches.

One particularly appealing advancement is Value-Based Management (VBM), which keys on a target's historical operations rather than future projections. VBM also can calculate the results of trade-offs when decisionmakers

must choose between a series of factors that can be changed to enhance postacquisition value.

Probably the best-known valuation tool designed to facilitate value creation and cash flow enhancement is Shareholder Value Analysis (SVA), introduced in the 1980s by Prof. Alfred Rappaport of Northwestern University. SVA may be defined as a two-step process. First, a discounted cash flow business valuation is performed. A projection of future cash flow (including a residual) is developed and discounted at an appropriate rate, usually the cost of capital, to arrive at an indicated value. Second, key factors (or value drivers), such as growth, profit margins, etc., are varied systematically to test the sensitivity of the indicated business value to each driver. Standard SVA sensitivity analysis changes each value driver plus or minus 1%, although analysts now often use "relevant ranges" and different percentages for upside and downside swings to reflect prevailing business realities.

SVA is a useful methodology, but, as with any tool, it has limitations. In working with middle-market companies, we have found that these limitations often are magnified into constraints that necessitate modifying standard SVA analysis. VBM, a first cousin to SVA, has resulted from these modifications and already has helped a number of middle-market companies improve their cash flows and values. The same techniques should prove useful to larger companies as well.

This article provides an abbreviated overview of VBM, describes how it differs from the traditional SVA framework, provides a simplified example, and discusses several applications in the m&a arena.

Although SVA has been in use for more than a decade, many executives still are leery of recommendations based on models that utilize projections, particularly when significant changes are suggested. Their argument is that when it's hard to predict results in the next quarter, how prudent is it to change a company's strategic direction based on a five-year projection?

Rather than use projections of future cash flow like SVA, the VBM framework utilizes historical cash flow. Five years of historical cash flow are added up to arrive at a cumulative baseline cash flow number. That is in contrast to SVA's method of discounting future cash flows to reach an indicated value.

Instead of testing the sensitivity of a value based on a projection, VBM tests the sensitivity of the historical cash flow. VBM tells the executive how much more or less cash flow would be in the bank today if certain events had occurred differently or if the company had operated differently in the past five years.

The use of actual historical data, rather than projections, has proven useful in testing the impact of alternative scenarios against the reality of actual events. It also has served as a catalyst to identify and implement actions that generate improvements. As long as a company's fundamental structure does not change going forward, the results provide meaningful insight regarding the probable outcomes of future strategic action. to the extent that risk is not increased, an executive may reasonably assume that an increase from historical cash flow trends likely would translate into enhanced value.

In the minds of some executives, particularly those with operations backgrounds, the traditional SVA "value drivers" are too far removed from daily operations to be relevant for short-term or medium-term planning. Therefore, VBM utilizes drivers that are more directly linked to operations. For example, rather than use operating profit margin as a broad value driver, a VBM analysis on a manufacturer would include a breakdown of cost of goods sold by key components. A probable mix would include:

- \* Materials -- The cost of raw materials and purchased components used in production, net of scrap sales.
- \* Human Resources -- All direct and indirect labor costs, fully loaded with all benefits -- regardless of where the accountants might classify them, i.e., in "General and Administrative" expense -- to get a true picture of manufacturing labor cost.
- \* Technology/Capital -- All costs associated with running and maintaining the manufacturing facilities and equipment (rent, depreciation, etc.) and R&D.
- \* Other Cost of Goods Sold -- Such as utilities, etc.

Compartmentalizing the costs allows managers to link strategy with pure day-to-day operating factors, such as



scrap rates, procurement procedures, pricing policies, etc. Much has been written about "linking" manufacturing operations to strategy as a means of establishing competitive advantage. VBM facilitates this process.

Traditional SVA assesses changes in one value driver at a time. But many strategic decision involve trade-offs, resulting in two or more value drivers changing simultaneously. The pressure on decisionmakers in those situations often is to concentrate change in the drivers that are assumed to offer the greatest enhancements in overall business value, even if such a focus in actuality works to the detriment of cash flow and value.

For example, a company might pursue lower-margin commodity business in order to grow by expanding the top line. Executives will be trading off profit margin for growth. But that's just for openers. A higher-growth game plan could necessitate increased capital expenditures – to improve efficiency, increase production, or boost productivity – so these additional costs must be incorporated in the decision. Since the net effect of such trade-off cannot be gleaned by simply "netting" the results of single-variable sensitivities, a model that can sort out concurrent changes in several value drivers can provide crucial information for an intelligent decision based on all relevant factors.

In the final analysis, VBM essentially utilizes SVA principles but advances the basic techniques by incorporating historical data, operations-linked value drivers, and concurrent changes in multiple value-drivers. So how does a VBM analysis look?

Table 1 shows a reconstructed historical operating cash flow statement for an actual company, using disguised data. (Table 1 omitted) As with traditional SVA, operating cash flows, which exclude interest expense and debt changes, are measured. Note the operations breakout – showing that fully loaded labor is the largest single cost, materials is second, and other costs are relatively small contributors – to determine the cost of goods sold. The ability to partition manufacturing costs in this manner is important to strategic decisionmaking. For example, while fully loaded human resources cost is about 33% of sales in Table 1, direct labor costs for the company were only 7%. This insight alone was an eye-opener for management.

The bottom-line operating cash flows for the five-year span are added up to produce a "total cumulative cash flow" of \$1,174,000. This represents a baseline cash now number that can be used in conjunction with sensitivity analysis to determine exactly what factors really "drive" the company's cash flow and value.

Table 2 shows the sensitivity of the baseline cash flow to changes in key factors. (Table 2 omitted) In other words, it demonstrates how the results might have turned out differently had operating or strategic changes been effected in the recent past. In turn, this suggests improvements that can be made in the future.

For example, a 5% annual increase in sales, while holding relative cost relationships constant, would have dramatically expanded cash flow by 84%. But such growth may be far more difficult to achieve than improving the productivity of operations. Thus, the sensitivity analysis also shows how changes in key cost and operating components can impact cash flow.

By comparing Tables 1 and 2, the analyst can determine which drivers can, if altered, impact cash flow the most. One striking conclusion is that the areas "where the big dollars are" do not always offer the greatest opportunities to improve cash flow and value. At our example company, Table 1 has established, human resources represent the largest component of cost of goods sold, suggesting that it is a labor-intensive operation.

working on fully loaded labor costs would not be unproductive. For a 1% cut, cumulative cash flow will expand by 7%. Moreover, the consequences of not controlling labor costs are dire, since the same 7-to-1 ratio works in reverse as a 10% rise in human resources costs chops cumulative cash flow by 70%. but the cash flow harvest is not as rich as in curbing material costs, where a 5% reduction will expand cumulative cash flow by 25%. Further, efforts to cut material costs often require less energy than a attack on labor costs, because many firms have tried to bleed every last dollar out of labor cost while ignoring material cost drivers like scrap and procurement.

With these data in hand, strategic changes now may be tied directly to manufacturing. Initiatives to control material costs, for example, might include standardizing or high unit cost/lower total cost through reduced scrap, eliminating overspecification on parts orders to vendors, and establishing better value chain management through closer relationships with suppliers. Reducing scrap or increasing growth may now be related directly to reducing setup times, streamlining the factory, shortening production runs, increasing manufacturing flexibility, and other factory-floor initiatives that impact costs, pricing, and competitive advantage.

Table 3 presents certain "bread-even trade-off," or how changes in two value drivers can offset each other and leave the baseline cash flow unchanged. (Table 3 omitted) Strategies can be evaluated in light of these trade-offs.

Complex modeling, varying three or more value drivers concurrently, is also possible. For example, our company in Table 1 may mount a strategy to enhance sales growth 5% a year by pursuing lower-margin business. Reaching the sales goal requires cutting gross margin 2%, stocking more product in inventory – thereby reducing turnover by two turns – and channeling an additional \$50,000 a year into capital outlays. Unless there is an overwhelming competitive reason for a pure sales-growth strategy, the approach is self-defeating from a value standpoint. It would reduce historical cumulative cash flow by about 10%.

The Table 1 example utilized a manufacturer. While the value drivers used for, say, a distributor would be different, the same sorts of linkages to operations can be developed.

This framework offers multiple applications to corporate acquirers. Prior to an acquisition, the VBM model can help identify hidden potential for quick cash flow generation – which is especially important for dealmakers in leveraged transactions. VBM has been used with great effectiveness in the due diligence process to evaluate risk. And postacquisition strategy formulation for the target also may include a VBM analysis.

Before making an acquisition, a company can derive great benefit from a VBM-based self-evaluation designed to identify strengths and weaknesses of its existing operations and strategies. It is a sad fact that many companies undertake acquisitions in an attempt to fix internal problems that they have not effectively addressed on their own. Invariably, they aggravate the problems by repeating the same mistakes on the targets they acquire and making both worse.

At a minimum, a VBM analysis might reveal upside potential a buyer could "acquire into," or downside risk that could be diversified away through acquisition. For example, a company that faces high downside risk if its growth slows might acquire a slow-growth, stable company to reduce the damage should the combined company not hit its growth targets.

A related but much broader issue critical to both corporate acquirers and dealmakers involves the design of incentive compensation plans. Traditional incentive plans tend to be tied to accounting-based earnings measures that may not be the best gauges of value change. More recently, incentive plans tied to cash flow, the same basic yardstick used to measure value, have grown in popularity. However, there are two major difficulties in implementing a value-based incentive compensation plan – it uses a projection that is generated by management, which means that it may be perceived by plan participants as self-serving, and there are problems in tying incentive plans to operations.

VBM addresses both of these concerns and offers the advantage of focusing on increments to value, rather than a single value for a company. The benefits of an incentive compensation plan for target management that is tied to value creation are compelling for the acquirer who is anxious to reap the greatest payoff from the combined organization.

On the other side, a potential seller can use VBM to "dress up" the business from a valuation standpoint before putting the company in play. Preferably, enhancement efforts should start three to five years prior to sale. This is especially important in the current M&A market where the seller gets paid more for demonstrated results than for great potential.

Further, some potential sellers are looking to "get out from under" problems that seem unsolvable. VBM can be used to help get a handle on the company's performance and identify areas that can be improved under the present ownership. The exercise may lead the seller to conclude that the resulting cash flow and value benefits make the company worth keeping.

VBM also can be used to add credibility to a seller's projection of sales, earnings, and cash flows. A projection that has the same sensitivity profile as the historical performance enjoys greater believability. If projected cash flow improvements are similar in magnitude to improvements that could have been achieved historically, the forecast is more readily accepted by the buyer. And if both the acquirer and target utilize VBM in constructing a projection, the two sides might come close to reaching a consensus on what constitutes a "realistic" projection of future performance.

The valuation concepts and models that are so critical to effective pricing of companies enjoy much wider versatility than their most common uses. They can be sensibly employed to evaluate other key factors such as risk assessment and ongoing value creation that can make the difference between a success or a failure in an acquisition. They offer potential buyers and sellers powerful tools that might give them a competitive edge in the m&a arena.

#### KEYS TO CREATING VALUE

Value-Based Management (VBM) represents one of the latest advancements in Discounted Cash Flow (DCF) modeling that is available to acquirers. VBM centers on what specific steps can be taken operationally and strategically to add value to a target after the deal is signed. It is based on the target's historical performance, rather than projections, and can show how the record might have been changed had managerial decisions and operating environments been different.

Sensitivity analysis of past results offers clues to what can be done in the future and which value drivers – e.g., sales growth, profit margins, productivity, etc. – should receive the most attention to achieve the optimal rewards.

Additionally, the VBM technique allows the analyst to figure key decisionmaking trade-offs, since attention to one driver may generate negative effects on others or two or more drivers may have to be varied in concert to produce the best results.

Daniel W. Bielinski is a manager in the Enterprise and Valuation Groups of Arthur Andersen & Co. in Milwaukee. He acknowledges the contribution to this article by Joseph R. Boehmer, a senior partner in Arthur Andersen's Enterprise Group in Milwaukee.

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# Office Action Summary

Application No.

10/743,616

Applicant(s)

EDER, JEFF SCOTT

Examiner

Jennifer Liversedge

Art Unit

3692

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO action for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 64-96 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 64-96 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/88)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

This Office Action is responsive to Applicant's amendment and request for reconsideration of application 10/743,616 filed on June 7, 2007.

The amendment contains amended claims: 64-65, 68, 73, 75-76, 79, 84, 86-87, 90-91 and 95.

The amendment contains previously presented claims: 66-67, 69-72, 74, 77-78, 80-83, 85, 88-89, 92-94 and 96.

Claims 1-63 have been previously canceled.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 65 and 76 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear from the claim language how the relative strength of the enterprise values are used in determining the discount rate to apply to the real options. It is claimed that the discount rate is a function of the relative strength of one or more enterprise elements of value, but it is not clear specifically how the elements make up and/or contribute to the overall determination of the discount rate.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 64, 66-69, 71-73, 75, 77-80, 82-84, 86-91 and 93-95 are rejected under 35 U.S.C. 102(b) as being anticipated by "How to sort out the premium drivers of post-deal value" by Daniel W. Bielinski (further referred to as Bielinski).

Regarding claims 64, 75 and 86-87, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus (pages 1-5), comprising:

Preparing transaction data related to a commercial enterprise for use in processing, developing a computational model of enterprise market value by element of value and segment of value by completing a series of multivariate analyses that utilize at least a portion of said data (pages 1-5), and

Completing activities selected from the group consisting of: determining an element of value contribution, quantifying an element of value impact on enterprise financial performance, completing an analysis of enterprise financial performance, optimizing one or more aspects of enterprise financial performance, simulating an enterprise financial performance, optimizing a future enterprise market value,

quantifying a future enterprise market value, creating a management report, valuing an enterprise market sentiment, calculating a real option discount rate, valuing a real option, valuing a share of enterprise stock, determining a target share price and combinations thereof where a segment of value further comprises a current operation and a segment of value selected from the group consisting of market sentiment, real option, derivative, excess financial asset and combinations thereof (pages 1-5).

Regarding claims 66, 77 and 88, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus where the elements of value are selected from the group consisting of alliances, brands, channels, customer relationships, employees, employee relationships, intellectual capital, intellectual property, partnerships, processes, production equipment, vendors, vendor relationships and combinations thereof (pages 2-4).

Regarding claims 67, 78 and 89, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus where preparing data for use in processing further comprises integrating data from a plurality of enterprise related systems in accordance with a common schema (pages 1-5).

Regarding claims 68, 79 and 90, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus where optimizing one or more aspects of enterprise financial performance further comprises identifying value

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driver changes that will optimize one or more aspects of financial performance where said aspects of financial performance are selected from the group consisting of revenue, expense, capital change, cash flow, current operation value, real option value, derivative value, future market value, market sentiment value, market value and combinations thereof (pages 1-5).

Regarding claims 69, 80 and 91, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus wherein a series of multivariate analyses are selected from the group consisting of identifying one or more previously unknown item performance indicators, discovering one or more previously unknown value drivers, identifying one or more previously unknown relationships between one or more value drivers, identifying one or more previously unknown relationships between one or more elements of value, quantifying one or more inter-relationships between value drivers, quantifying one or more impacts between elements of value, developing one or more composite variables, developing one or more vectors, developing one or more causal element impact summaries, identifying a best fit combination of predictive model algorithm and element impact summaries for modeling enterprise market value and each of the components of value, determining a net element of value impact for each segment of value, determining a relative strength of a plurality of elements of value between two or more enterprises, developing one or more real option discount rates, calculating one or more real option values, calculating an



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enterprise market sentiment value by element of value, and combinations thereof (pages 1-5).

Regarding claims 71, 82 and 93, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus wherein enterprise related transaction data are obtained from systems selected from the group consisting of advanced financial systems, basic financial systems, alliance management systems, brand management systems, customer relationship management systems, channel management systems, estimating systems, intellectual property management systems, process management systems, supply chain management systems, vendor management systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, web site systems, the Internet, external databases and combinations thereof (pages 1-5).

Regarding claims 72, 83 and 94, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus wherein an enterprise further comprises a single product, a group of products, a division or an entire company (pages 1-5).

Regarding claim 73, 84 and 95, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus wherein a computational model of enterprise market value further comprises a combination of models selected from the group consisting of a predictive component of value model, a real option discount rate model, a real option valuation model, a derivative valuation model, an excess financial asset valuation model, a market sentiment model by element of value and combinations thereof (pages 1-5).

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 65 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bielinski, and further in view of "The use of options theory to value research in the service sector" by K. Jensen and P. Warren (further referred to as Jensen).

Bielinski does not disclose where a real options segment of value is valued using a discount rate that is a function of the relative strength of one or more enterprise elements of value. However, Jensen discloses where a real options segment of value is valued using a discount rate that is a function of the relative strength of one or more enterprise elements of value (pages 1-8). It would be obvious to one of ordinary skill in the art at the time of the invention to use the strength of an element of value to value a real option as the companies current value elements would be most representative of the value at which potential future projects would be evaluated.

Claims 70, 81, 92, 74, 85 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bielinski, and further in view of "Machine-learning research: Four current directions" by Thomas G. Deitterich (further referred to as Deitterich).

Regarding claims 70, 81 and 92, Bielinski does not disclose an enterprise management method, program storage device with instructions and apparatus wherein a predictive model algorithm is selected from the group consisting of neural network; classification and regression tree; generalized autoregressive conditional heteroskedasticity; regression; generalized additive; redundant regression network;

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rough-set analysis; Bayesian; multivariate adaptive regression spline and support vector method.

However, Deitterich discloses an enterprise management method, program storage device with instructions and apparatus wherein a predictive model algorithm is selected from the group consisting of neural network; classification and regression tree; generalized autoregressive conditional heteroskedasticity; regression; generalized additive; redundant regression network; rough-set analysis; Bayesian; multivariate adaptive regression spline and support vector method (pages 1-39).

It would be obvious to one of ordinary skill in the art to modify the computerized models for determining valuation by using multiple value drivers as disclosed by Kielinski to adapt the use of the model algorithms as disclosed by Deitterich. The motivation would be to use an algorithm from among the many known algorithms for performing computations.

Regarding claims 74, 85 and 96, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus where genetic algorithms are used to identify changes that will optimize one or more aspects of enterprise financial performance and multi-criteria optimization models are used to identify the changes that will optimize two or more aspects of enterprise financial performance (pages 1-5).

Bielinski does not disclose an enterprise management method, program storage device with instructions and apparatus where a Markov Chain Monte Carlo model is

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used to identify one or more changes that will optimize one aspect of enterprise financial performance. However, Dietterich discloses the use of a Markov Chain Monte Carlo model for optimization (pages 5-6). It would be obvious to one of ordinary skill in the art to modify the computerized models for determining valuation by using multiple value drivers as disclosed by Kielinski to adapt the use of the Markov Chain Monte Carlo model as disclosed by Deitterich. The motivation would be to use a model which is used with neural networks for performing combinatorial optimization computations.

### *Response to Arguments*

Applicant argues that Bielinski fails to disclose "segments of value" and that the Examiner has failed to particularly point out and provide reasoning by which the Examiner finds support in Bielinski for "segments of value". Referencing page 2 of the present application's specification, it is stated that segments of value include current operation, real options/contingent liabilities, derivatives, excess financial assets and market sentiment for the organization. Bielinski discloses segments of value according to this definition as noted in the previous and current Office Actions. Bielinski discloses using sensitivity analysis on value drivers (pages 1-3) to help decision makers chose and optimize from amongst current and potential future choices (pages 1-5), using drivers associated with current operations (pages 2-3) and real options (pages 2-3) in order to make projections regarding future cash flows (page 2-4)

Applicant further argues that the Bielinski reference "is not even remotely similar to the claimed invention". Examiner respectfully disagrees. As noted above, Bielinski discloses using sensitivity analysis on value drivers to help decision makers choose and optimize from amongst current and potential future choices, using drivers associated with current operations and real options in order to make projections regarding future cash flows. Examiner finds that the Bielinski and the current application share goals and objectives of optimizing performance through value drivers and simulation thereof and means of obtaining those results.

Applicant claims that the combination of Bielinski and Dietrich by reasons of: 1) teaching away from the claimed invention through incompatible methods, 2) change in the historical analysis principal explicitly required by Bielinski, and 3) fails to meet any of the criteria for establishing a prima facie case of obviousness.

Regarding 1) teaching away from the claimed invention through incompatible methods: Examiner respectfully disagrees. Bielinski discloses models using models that utilize projections of future cash flows using SVA, and utilizing historical cash flows using VBM methods. Bielinski discloses providing insight regarding the probable outcomes of future strategic action, with a model that can account for changes in several value drivers concurrently to provide for sound decision making. Bielinski also discloses the greater believability in a projection that has the same sensitivity profile as the historical performance, where analyzing data from the past can be used to learn

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about what should be done in the future for optimal results given an array of trade-offs to consider.

Dietterich discloses certain techniques that can be implemented for combinatorial optimization, such as machine learning or neural networks with well known procedures such as Markov chain Monte Carlo and Bayesian methods to generate sequences of hypotheses. These techniques provide a way in which a system can learn from data and provide decision makers with invaluable insight regarding patterns which can be used in making future decisions. Dietterich identifies ways, such as through Markov chain Monte Carlo and Bayesian methods, by which data can be analyzed for input into the decision making process.

Regarding 2) change in the historical analysis principal explicitly required by Bielinski: Examiner respectfully disagrees. Bielinski uses data which is historical and current and using that data makes projections for future cash flows. Bielinski also discloses the use of models using projections of future cash flows with the SVA models. Data is historical by nature. Once it is captured and viewed, it is historical, even if historical by only seconds. Both Bielinski and Dietterich disclose the analysis of data in order to learn and make predictions in order to optimize performance in the future.

Regarding 3) falls to meet any of the criteria for establishing a prima facie case of obviousness: Examiner respectfully disagrees. As noted in the responses above, Examiner finds that there is a reasonable expectation of success in the combination as presented, that the references teach or suggest one or more of the limitations of the independent claims, and that a realistic motivation exists to make the combination.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to Jennifer Liversedge whose telephone number is 571-272-3167. The examiner can normally be reached on Monday – Friday, 8:30 – 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Kramer can be reached at 571-272-6783. The fax number for the organization where the application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for



<b>Notice of References Cited</b>	Application/Control No. 10/743,616	Applicant(s)/Patent Under Reexamination EDER, JEFF SCOTT	
	Examiner Jennifer Liversedge	Art Unit 3692	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
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	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Kjeld Jenses and Paul Warren. The use of options theory to value research in the service sector. R&D Management 31, 2, 2001. Blackwell Publishers Ltd. 2001. April 2001. (9 pages).
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,616	12/22/2003	Jeff Scott Eder	AR - 61	8217
53781 7590 02/11/2005 ASSET TRUST, INC. 2020 MALTBY ROAD SUITE 7362 BOTHELL, WA 98021			EXAMINER LIVERSEDGE, JENNIFER L.	
			ART UNIT 3692	PAPER NUMBER
			MAIL DATE 02/11/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10743.616

Applicant(s)

EDER, JEFF SCOTT

Examiner

Jennifer Liversedge

Art Unit

3692

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
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## Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

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- 4) ☒ Claim(s) 64-96 is/are pending in the application.
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- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received

## Attachment(s)

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- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date: 3/21/2007
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

This Office Action is responsive to Applicant's amendment and request for continued examination of Application 10/743,616 filed on November 6, 2007.

The amendment contains previously presented claims: 66-67, 69-74, 77-78 and 80-96.

The amendment contains amended claims: 64-65, 68, 75-76 and 79.

Claims 1-63 have been previously canceled.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 6, 2007 has been entered.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 11/21/2007 is being considered by the examiner. However, the pieces of literature submitted in the IDS were all published after the priority date being claimed in the present application and therefore do not weigh on the patentability of the present application.

Additionally, Examiner notes the receipt of the Declaration under Rule 132 received on 11/6/2007 with the amendment as submitted by Dr. Peter Brous.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 64-96 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. A complete explanation of all combinations for activity selection as cited in claim 1 are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

As the claim is set forth as a Markush claim wherein the last element of group is "and combinations thereof", the written description must include a description of how the activities, if selected in any combination, would operate together. For example, the invention must be operable and enabled if the activities of and only of, for example, optimizing one or more aspects of enterprise financial performance and valuing a real option are selected. In the particular instance, the written description does not support the selection of only these two activities. All permutations thereof are applicable in describing the invention given the Markush group with the last element of the group being "and combinations thereof". The same rejection applies to all depended claims in the same form.

} with 107

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 64, 66-69, 71-73, 75, 77-80, 82-84, 86-91 and 93-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over "How to sort out the premium drivers of post-deal value" by Daniel W. Bielinski (further referred to as Bielinski), in view of "Outdated corporate reporting practices fail to measure companies' true value" in M2 Presswire (further referred to as M2) and further in view of "Finance and economics: shining a light on company accounts" in The Economist (further referred to as The Economist).

Regarding claims 64, 75 and 86-87, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus (pages 1-5), comprising:

Preparing a plurality of transaction data related to a commercial enterprise for use in processing, developing a computational model of enterprise market value by element of value and segment of value by completing a series of multivariate analyses that utilize at least a portion of said data (pages 1-5), and

Completing activities selected from the group consisting of: determining an element of value contribution, quantifying an element of value impact on enterprise financial performance, completing an analysis of enterprise financial performance, optimizing one or more aspects of enterprise financial performance, simulating an enterprise financial performance, optimizing a future enterprise market value, quantifying a future enterprise market value, creating a management report, calculating a real option discount rate, valuing a real option, valuing a share of enterprise stock, determining a target share price and combinations thereof where a segment of value further comprises a current operation and a segment of value selected from the group consisting of real option and excess financial asset and combinations thereof, and where (pages 1-5).

Bielinski does not disclose valuing an enterprise using the elements of market sentiment and derivative.

However, M2 discloses valuing an enterprise using the elements of market sentiment (pages 2-3). It would be obvious to one of ordinary skill in the art at the time

of the invention to modify the corporate valuation method as disclosed by Bielinski to adapt the use of valuing market sentiment as disclosed by M2. The motivation would be to account for all of a corporation's assets among which includes market sentiment.

Neither Bielinski nor M2 disclose valuing an enterprise using derivatives. However, The Economist discloses where derivatives are now being marked to market and included on a corporation's balance sheet with other assets (pages 1-2). It would be obvious to combine the use of recognizing derivatives as an asset on a corporation's balance sheet for purposes of total valuation as disclosed by The Economist with the method of valuing and accounting for all of a corporations assets in determining its value as disclosed by M2 and Bielinski. The motivation would be to capture all of a corporation's assets in determining its value.

Regarding claims 66, 77 and 88, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus where the elements of value are selected from the group consisting of alliances, brands, channels, customer relationships, employees, employee relationships, intellectual capital, intellectual property, partnerships, processes, production equipment, vendors, vendor relationships and combinations thereof (pages 2-4).

Regarding claims 67, 78 and 89, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus where preparing data



for use in processing further comprises integrating data from a plurality of enterprise related systems in accordance with a common schema (pages 1-5).

Regarding claims 68, 79 and 90, Bielinski, M2 and The Economist disclose an enterprise management method, program storage device with instructions and apparatus where optimizing one or more aspects of enterprise financial performance further comprises identifying value driver changes that will optimize one or more aspects of financial performance where said aspects of financial performance are selected from the group consisting of revenue, expense, capital change, cash flow, current operation value, real option value, derivative value, future market value, market sentiment value, market value and combinations thereof (pages 1-5) and as provided in claims 64, 75 and 86.

Regarding claims 69, 80 and 91, Bielinski, M2 and The Economist disclose an enterprise management method, program storage device with instructions and apparatus wherein a series of multivariate analyses are selected from the group consisting of identifying one or more previously unknown item performance indicators, discovering one or more previously unknown value drivers, identifying one or more previously unknown relationships between one or more value drivers, identifying one or more previously unknown relationships between one or more elements of value, quantifying one or more inter-relationships between value drivers, quantifying one or more impacts between elements of value, developing one or more composite variables,

developing one or more vectors, developing one or more causal element impact summaries, identifying a best fit combination of predictive model algorithm and element impact summaries for modeling enterprise market value and each of the components of value, determining a net element of value impact for each segment of value, determining a relative strength of a plurality of elements of value between two or more enterprises, developing one or more real option discount rates, calculating one or more real option values, calculating an enterprise market sentiment value by element of value, and combinations thereof (pages 1-5) and as provided in claims 64, 75 and 86.

Regarding claims 71, 82 and 93, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus wherein enterprise related transaction data are obtained from systems selected from the group consisting of advanced financial systems, basic financial systems, alliance management systems, brand management systems, customer relationship management systems, channel management systems, estimating systems, intellectual property management systems, process management systems, supply chain management systems, vendor management systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, web site systems, the Internet, external databases and combinations thereof (pages 1-5).

Regarding claims 72, 83 and 94, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus wherein an enterprise further comprises a single product, a group of products, a division or an entire company (pages 1-5).

Regarding claim 73, 84 and 95, Bielinski, M2 and The Economist disclose an enterprise management method, program storage device with instructions and apparatus wherein a computational model of enterprise market value further comprises a combination of models selected from the group consisting of a predictive component of value model, a real option discount rate model, a real option valuation model, a derivative valuation model, an excess financial asset valuation model, a market sentiment model by element of value and combinations thereof (pages 1-5) as provided in claims 64, 75 and 86.

Claims 65 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bielinski, M2 and The Economist and further in view of "The use of options theory to value research in the service sector" by K. Jensen and P. Warren (further referred to as Jensen).

Neither Bielinski, M2 nor The Economist disclose where a real options segment of value is valued using a discount rate that is a function of the relative ranking of one or more enterprise elements of value. However, Jensen discloses where a real options segment of value is valued using a discount rate that is a function of the relative ranking

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of one or more enterprise elements of value (pages 1-8). It would be obvious to one of ordinary skill in the art at the time of the invention to use the strength of an element of value to value a real option as the companies current value elements would be most representative of the value at which potential future projects would be evaluated.

Claims 70, 74, 81, 85, 92, and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bielinski, M2, The Economist and further in view of "Machine-learning research: Four current directions" by Thomas G. Deitterich (further referred to as Deitterich).

Regarding claims 70, 81 and 92, neither Bielinski, M2 nor The Economist disclose an enterprise management method, program storage device with instructions and apparatus wherein a predictive model algorithm is selected from the group consisting of neural network; classification and regression tree; generalized autoregressive conditional heteroskedasticity; regression; generalized additive; redundant regression network; rough-set analysis; Bayesian; multivariate adaptive regression spline and support vector method.

However, Deitterich discloses an enterprise management method, program storage device with instructions and apparatus wherein a predictive model algorithm is selected from the group consisting of neural network; classification and regression tree; generalized autoregressive conditional heteroskedasticity; regression; generalized

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additive; redundant regression network; rough-set analysis; Bayesian; multivariate adaptive regression spline and support vector method (pages 1-39).

It would be obvious to one of ordinary skill in the art to modify the computerized models for determining valuation by using multiple value drivers as disclosed by Bielinski, M2 and The Economist to adapt the use of the model algorithms as disclosed by Deitterich. The motivation would be to use an algorithm from among the many known algorithms for performing computations.

Regarding claims 74, 85 and 96, Bielinski discloses an enterprise management method, program storage device with instructions and apparatus where genetic algorithms are used to identify changes that will optimize one or more aspects of enterprise financial performance and multi-criteria optimization models are used to identify the changes that will optimize two or more aspects of enterprise financial performance (pages 1-5).

Neither Bielinski, M2 nor The Economist disclose an enterprise management method, program storage device with instructions and apparatus where a Markov Chain Monte Carlo model is used to identify one or more changes that will optimize one aspect of enterprise financial performance. However, Dietterich discloses the use of a Markov Chain Monte Carlo model for optimization (pages 5-6). It would be obvious to one of ordinary skill in the art to modify the computerized models for determining valuation by using multiple value drivers as disclosed by Bielinski, M2 and The Economist to adapt the use of the Markov Chain Monte Carlo model as disclosed by Deitterich. The

motivation would be to use a model which is used with neural networks for performing combinatorial optimization computations.

### ***Response to Arguments***

Applicant's arguments with respect to claims 64-96 have been considered but are moot in view of the new ground(s) of rejection as set forth in the reconsideration after filing an RCE.

### ***Conclusion***

Any inquiry concerning this communication should be directed to Jennifer Liversedge whose telephone number is 571-272-3167. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached at 571-272-6702. The fax number for the organization where the application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/743,616

Page 13

Art Unit: 3692

Jennifer Liversedge

Examiner

Art Unit 3692

/Harish T Dass/

Primary Examiner, Art Unit 3692

<p>Substitute for form 1449 PTO</p> <h2 style="text-align: center; margin: 10px 0;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</h2> <p style="text-align: center; font-size: small;">(Use as many sheets as necessary)</p>	<p style="text-align: center; font-weight: bold;">Complete if Known</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Application Number</td> <td>10/743,616</td> </tr> <tr> <td>Filing Date</td> <td>12/22/2003</td> </tr> <tr> <td>First Named Inventor</td> <td>Jeff S. Eder</td> </tr> <tr> <td>Art Unit</td> <td>3692</td> </tr> <tr> <td>Examiner Name</td> <td>Jennifer Liversedge</td> </tr> <tr> <td>Attorney Docket Number</td> <td>AR - 61</td> </tr> </table>	Application Number	10/743,616	Filing Date	12/22/2003	First Named Inventor	Jeff S. Eder	Art Unit	3692	Examiner Name	Jennifer Liversedge	Attorney Docket Number	AR - 61
Application Number	10/743,616												
Filing Date	12/22/2003												
First Named Inventor	Jeff S. Eder												
Art Unit	3692												
Examiner Name	Jennifer Liversedge												
Attorney Docket Number	AR - 61												
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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		BALLOW, JOHN; BURGMAN, ROLAND; BURGOZ, SCOTT; "Enhanced Business Reporting" : October 2004, pages 1 - 30, Asset Economics, U.S.A.	
		CHAROENROOK, ANCHANDA; "Does Sentiment Matter?"; December 2003, pages 1 - 44, Financial Management Association International, U.S.A.	
		BANDOPADHYAYA, ARINDAM, JONES, ANNE LEAH; "Measuring investor sentiment in equity markets"; February 2006, v7, pages 208 - 215, Journal Asset Management, U.S.A.	
		PHYSORG.COM, "How much information is too much information?"; pages 1 - 2;, February 15, 2005, PHYSORG.COM, University of Queensland, Australia	

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



<b>Notice of References Cited</b>	Application/Control No. 10/743,616	Applicant(s)/Patent Under Reexamination EDER, JEFF SCOTT	
	Examiner Jennifer Liversedge	Art Unit 3692	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
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	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)			
	U	M2 Presswire. "John Wiley & SOns: Outdated corporate reporting practices fail to measure companies' true value". Coventry: Feb 22, 2001			
	V	The Economist. "Finance and economics: shining a light on company accounts: accounting". London: Aug 18, 2001. Vol. 360, Iss. 8235.			
	W				
	X				

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/746,673	12/24/2003	Jeff Scott Eder	VM-62	3740
29051	7590	04/12/2005	EXAMINER	
JEFF EDER 19108 30TH DRIVE SE MILL CREEK, WA 98012			NELSON, FREDA ANN	
			ART UNIT	PAPER NUMBER

3639

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/746,673

Applicant(s)

EDER, JEFF SCOTT

Examiner

Freda Nelson

Art Unit

3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☒ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/24/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

This is in response to the communications filed on February 20, 2004 and May 17, 2004. Claims 1-22 are currently pending.

***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 12/24/03 and 01/05/05 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner. Copies of PTO-1449 are attached hereto.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 1-10 and 13-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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As for claim 1, it is unclear to the Examiner how a model is created that quantifies a net impact. The specification does not disclose how a model is created or what is meant by "net impact".

As for claim 3, it is unclear to the Examiner what the applicant means by "market sentiment".

As for claim 13, it is unclear to the Examiner how a "contribution model" is developed. The specification does not disclose how a "contribution model" is developed.

As for claim 22, it is unclear to the Examiner how a model is created that quantifies a net impact. The specification does not disclose how a model is created or what is meant by "net impact".

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 13 recites the limitation "the contribution model" in lines 2-5. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC §101***

3. Claims 1-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts. In the present case, claim 1 only recites an abstract idea. The recited steps of merely obtaining a performance model that quantifies the impact of elements and sub-elements of value on the value of a business with at least one customer, defining one or more baskets purchased from the business and their associated causal SKU'S by sub-element of customer value, and identify a causal SKU promotional offer for each basket that maximizes business value using said performance model does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of pricing.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. In the present case, none of the recited steps are directed to anything in the technological arts as explained above with the exception of the recitation in the preamble that the method is "computer implemented". Looking at the claim as a whole, nothing the body of the claim recites any structure or functionality to suggest that a computer performs the recited steps. Therefore, the preamble is taken to merely recite a field of use.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention produces scores for various policies (i.e., repeatable) used in determining and selecting the best insurance policy (i.e., useful and tangible).

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claims 1-8 are deemed to be directed to non-statutory subject matter.

### ***Response to Amendments***

4. The amendment to the claims filed on 02/20/04 and 05/17/04 do not comply with the requirements of 37 CFR 1.121(c) because the pre amendment dated 02/20/04 was unsigned; incorrect status identifiers were used for claims 1-22 in the pre amendment dated 05/17/04; and the amendment dated 05/17/04 contains markings to indicate the changes that have been made which **are not** relative to the immediate prior version of the claims.

Amendments to the claims filed on or after July 30, 2003 must comply with 37 CFR 1.121(c) which states:

(c) *Claims*. Amendments to a claim must be made by rewriting the entire claim with all changes (e.g., additions and deletions) as indicated in this subsection, except when the claim is being canceled. Each amendment document that includes a change to an existing claim, cancellation of an existing claim or addition of a new claim, must include a complete listing of all claims ever presented, including the text of all pending and withdrawn claims, in the application. The claim listing, including the text of the claims, in the amendment document will serve to replace all prior versions of the claims, in the application. In the claim listing, the status of every claim must be indicated after its claim number by using one of the following identifiers in a parenthetical expression: **(Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered)**.

(1) *Claim listing*. All of the claims presented in a claim listing shall be presented in ascending numerical order. Consecutive claims having the same status of "canceled" or "not entered" may be aggregated into one statement (e.g., Claims 1-5 (canceled)). The claim listing shall commence on a separate sheet of the amendment document and the sheet(s) that contain the text of any part of the claims shall not contain any other part of the amendment.

(2) *When claim text with markings is required*. **All claims being currently amended in an amendment paper shall be presented in the claim listing, indicate a status of "currently amended," and be submitted with markings to indicate the changes that have been made relative to the immediate prior version of the claims. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter**



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**must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters.** The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. Only claims having the status of "currently amended," or "withdrawn" if also being amended, shall include markings. If a withdrawn claim is currently amended, its status in the claim listing may be identified as "withdrawn—currently amended."

**(3) *When claim text in clean version is required.*** The text of all pending claims not being currently amended shall be presented in the claim listing in clean version, *i.e.*, without any markings in the presentation of text. The presentation of a clean version of any claim having the status of "original," "withdrawn" or "previously presented" will constitute an assertion that it has not been changed relative to the immediate prior version, except to omit markings that may have been present in the immediate prior version of the claims of the status of "withdrawn" or "previously presented." **Any claim added by amendment must be indicated with the status of "new" and presented in clean version, *i.e.*, without any underlining.**

**(4) *When claim text shall not be presented; canceling a claim.***

(i) No claim text shall be presented for any claim in the claim listing with the status of "canceled" or "not entered."

(ii) Cancellation of a claim shall be effected by an instruction to cancel a particular claim number. Identifying the status of a claim in the claim listing as "canceled" will constitute an instruction to cancel the claim.

**(5) *Reinstatement of previously canceled claim.*** A claim which was previously canceled may be reinstated only by adding the claim as a "new" claim with a new claim number.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freda Nelson whose telephone number is (703) 305-0261. The examiner can normally be reached on Monday - Friday.

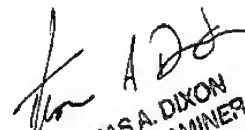
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (703) 308-2702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FAN 03/28/2005

Art Unit 3629



THOMAS A. DIXON  
PRIMARY EXAMINER

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10746,673	EDER, JEFF SCOTT	
	Examiner	Art Unit	
	Freda A. Nelson	3639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 23-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 23-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

The amendment received on December 16, 2005 is acknowledged and entered. Claims 1-16 and 23-30 have been amended. Claims 17-22 have been canceled. Claims 31-32 have been added. Claims 1-16 and 23-32 are currently pending.

### ***Information Disclosure Statement***

1. The information disclosure statements (IDSs) submitted on 07/11/2005, 08/22/2005, 01/13/2006, 02/12/2006, 02/18/2006, 04/30/2006, 05/06/2006 and 05/07/06/2006 are in compliance with the provisions of 37 CFR 1.97. However, the examiner notes that due to the lengthiness of the references as a whole the examiner has performed a cursory review of the references submitted. The examiner seeks the assistance of the applicant in identifying those references which are pertinent to the pending claims of the instant application.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-16 and 23-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The examiner is unable to determine how the performance model quantifies an impact of a plurality of elements of value and sub-elements of value on a value of the business.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 3-6, 8-13, 23, 25-28 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "customer value" in line 13. There is insufficient antecedent basis for this limitation in the claim.

As for claim 1, the examiner is unable to determine what the applicant is claiming by the claim language "basket-sub" in line 15.

As for claim 1, the examiner is unable to determine what the applicant is claiming by the claim language "SKU" in lines 9-10 and 17-18, respectively.

As for claim 1, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU" in lines 10 and 17, respectively.

As for claim 1, the examiner is unable to determine how a business purchases a basket of SKUs.

Claim 3 recites the limitation "the contents" in line 5. There is insufficient antecedent basis for this limitation in the claim.

As for claim 4, the examiner is unable to determine what the applicant is claiming by the claim language "CCU" or "LCD causal association algorithm" in line 4.

As for claim 4, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU's" in line 5.

Claim 5 recites the limitation "the group" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the group" in line 3, "the loyalty" in line 4, "the supply chain status" in line 5, and "the choice" in lines 5 and 6, respectively. There is insufficient antecedent basis for these limitations in the claim.

Claim 9 recites the limitation "customer value" in line 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the processors" in line 6. There is insufficient antecedent basis for this limitation in the claim.

As for claim 9, the examiner is unable to determine what the applicant is claiming by the claim language "SKU's" in lines 12-13, respectively.

As for claim 9, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU's" in line 13.

As for claim 9, the examiner is unable to determine how a business purchases a basket of SKU's.

As for claim 9, the examiner is unable to determine what the applicant is claiming by the claim language "basket-sub" in line 16.

Claim 9 recites the limitation "the group" in line 18. There is insufficient antecedent basis for this limitation in the claim.

As for claims 10-16, the examiner is unable to determine if the applicant is claiming a computer readable medium or a method.

Claim 10 recites the limitation "the method" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "the method" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the method" in line 4. There is insufficient antecedent basis for this limitation in the claim.

As for claim 12, the examiner is unable to determine what the applicant is claiming by the claim language "CCU" or "LCD causal association algorithm" in line 3.

As for claim 12, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU's" in line 4.

Claim 13 recites the limitation "the group" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "the group" in line 3. There is insufficient antecedent basis for this limitation in the claim.

As for claim 14, the examiner is unable to determine what the applicant is claiming by the claim language "SKU" in lines 4-5.

As for claim 14, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU" and "causal SKU discount" in line 4.

Claim 23 recites the limitation "customer value" in line 12. There is insufficient antecedent basis for this limitation in the claim.

As for claim 23, the examiner is unable to determine what the applicant is claiming by the claim language "basket-sub" in line 14.

Claim 23 recites the limitation "the group" in line 16. There is insufficient antecedent basis for this limitation in the claim.

As for claim 23, the examiner is unable to determine how a business purchases a basket of SKUs.

As for claim 25, the examiner is unable to determine what the applicant is claiming by the claim language "SKU's" in line 5.

As for claim 26, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU's" in lines 4 and 5-6, respectively.

As for claim 26, the examiner is unable to determine what the applicant is claiming by the claim language "CCU" or "LCD causal association algorithm" in line 5.

Claim 27 recites the limitation "the group" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 28 recites the limitation "the group" in line 3. There is insufficient antecedent basis for this limitation in the claim.

As for claim 28, the examiner is unable to determine what the applicant is claiming by the claim language "SKU's" in lines 3-5.



As for claim 28, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU" and "causal SKU discount" in lines 3-4.

Claim 30 recites the limitation "the group" in line 5. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. See detailed discussion below.

As the Supreme Court held, Congress chose the expansive language of 35 U.S.C. § 101 so as to include "anything under the sun that is made by man." *Diamond v. Chakrabarty*, 447 U.S. 303, 308-09, 206 USPQ 193, 197 (1980). In *Chakrabarty*, 447 U.S. at 308-309, 206 USPQ at 197, the court stated:

In choosing such expansive terms as "manufacture" and "composition of matter," modified by the comprehensive "any," Congress plainly contemplated that the patent laws would be given wide scope. The relevant legislative history also supports a broad construction. The Patent Act of 1793, authored by Thomas Jefferson, defined statutory subject matter as "any new and useful art, machine, manufacture, or composition of matter, or any new or useful improvement [thereof]." Act of Feb. 21, 1793, ch. 11, § 1, 1 Stat. 318. The Act embodied Jefferson's philosophy that "ingenuity should receive a liberal encouragement." V Writings of Thomas Jefferson, at 75-76. See *Graham v. John Deere Co.*, 383 U.S. 1, 7-10 (148 USPQ 459, 462-464) (1966). Subsequent patent statutes in 1836, 1870, and 1874 employed this same road language. In 1952, when the patent laws were recodified, Congress replaced the word "art" with "process," but otherwise left Jefferson's language intact. The Committee Reports accompanying the 1952 Act inform us that Congress intended statutory subject matter to

"include anything under the sun that is made by man." S. Rep. No. 1979, 82d Cong., 2d Sess., 5 (1952); H.R. Rep. No. 1923, 82d Cong., 2d Sess., 6 (1952). [Footnote omitted]

This perspective has been embraced by the Federal Circuit:

The plain and unambiguous meaning of section 101 is that any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may be patented if it meets the requirements for patentability set forth in Title 35, such as those found in sections 102, 103, and 112. The use of the expansive term "any" in section 101 represents Congress's intent not to place any restrictions on the subject matter for which a patent may be obtained beyond those specifically recited in section 101 and the other parts of Title 35.... Thus, it is improper to read into section 101 limitations as to the subject matter that may be patented where the legislative history does not indicate that Congress clearly intended such limitations.

Alappat, 33 F.3d at 1542, 31 USPQ2d at 1556.

35 U.S.C. § 101 defines four categories of inventions that Congress deemed to be the appropriate subject matter of a patent: processes, machines, manufactures and compositions of matter.

Federal courts have held that 35 U.S.C. § 101 does have certain limits. First, the phrase "anything under the sun that is made by man" is limited by the text of 35 U.S.C. § 101, meaning that one may only patent something that is a machine, manufacture, composition of matter or a process. See, e.g., Alappat, 33 F.3d at 1542, 31 USPQ2d at 1556; In re Warmerdam, 33 F.3d 1354, 1358, 31 USPQ2d 1754, 1757 (Fed. Cir. 1994). Second, 35 U.S.C. § 101 requires that the subject matter sought to be patented be a "useful" invention. Accordingly, a complete definition of the scope of 35 U.S.C. § 101, reflecting Congressional intent, is that any new and useful process, machine,

manufacture or composition of matter under the sun that is made by man is the proper subject matter of a patent.

The subject matter courts have found to be outside of, or exceptions to, the four statutory categories of invention is limited to abstract ideas, laws of nature and natural phenomena. These three exclusions recognize that subject matter that is not a practical application or use of an idea, a law of nature or a natural phenomenon is not patentable. See, e.g., *Rubber-Tip Pencil Co. v. Howard*, 87 U.S. (20 Wall.) 498, 507 (1874) ("idea of itself is not patentable, but a new device by which it may be made practically useful is"); *Mackay Radio & Telegraph Co. v. Radio Corp. of America*, 306 U.S. 86, 94, 40 USPQ 199, 202 (1939) ("While a scientific truth, or the mathematical expression of it, is not patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be."); *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759 ("steps of 'locating' a medial axis, and 'creating' a bubble hierarchy . . . describe nothing more than the manipulation of basic mathematical constructs, the paradigmatic 'abstract idea'").

The courts have also held that a claim may not preempt ideas, laws of nature or natural phenomena. The concern over preemption was expressed as early as 1852. See *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 175 (1852) ("A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right."); *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 132, 76 USPQ 280, 282 (1948) (combination of six species of bacteria held to be nonstatutory subject matter). Accordingly, one may not patent every

"substantial practical application" of an idea, law of nature or natural phenomena because such a patent "in practical effect be a patent on the [idea, law of nature or natural phenomena] itself." *Gottschalk v. Benson*, 409 U.S. 63, 71-72, 175 USPQ 673, 676 (1972).

A claim that requires one or more acts to be performed defines a process. The applicant's invention is directed to a method or a process and thus falls within an enumerated statutory class.

However, not all processes are statutory under 35 USC Section 101. To be statutory, a claimed process must either: (A) result in a physical transformation which a practical application is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application which produces a useful, tangible, and concrete result. See *Diehr*, 450 U.S. at 183-84, 209 USPQ at 6.

Upon making the determination that the invention is a method or process that falls within an enumerated statutory class, the Examiner must now determine whether the claimed invention falls within one of the Section 101 judicial exceptions, i.e., is the invention directed to laws of nature, natural phenomena or an abstract idea. Moreover, in evaluating whether the claims meet the requirements of section 101, the Supreme Court requires the Examiner to consider the claims as a whole to determine whether the invention is for a particular application of an abstract idea, rather than an abstract idea itself.

**Exceptions: Laws of nature, natural Phenomena and Abstract Ideas:**

Inventions directed to nothing more than abstract ideas (such as mathematical algorithms), natural phenomena, and laws of nature are not eligible and therefore are excluded from patent protection. *Diehr*, 450 U.S. at 185, 209 USPQ at 7; accord, e.g., *Chakrabarty*, 447 U.S. at 309, 206 USPQ at 197; *Parker v. Flook*, 437 U.S. 584, 589, 198 USPQ 193, 197 (1978); *Benson*, 409 U.S. at 67-68, 175 USPQ at 675; *Funk*, 333 U.S. at 130, 76 USPQ at 281. "A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right." *Le Roy*, 55 U.S. (14 How.) at 175. Instead, such "manifestations of laws of nature" are "part of the storehouse of knowledge," "free to all men and reserved exclusively to none." *Funk*, 333 U.S. at 130, 76 USPQ at 281.

Thus, "a new mineral discovered in the earth or a new plant found in the wild is not patentable subject matter" under Section 101. *Chakrabarty*, 447 U.S. at 309, 206 USPQ at 197. "Likewise, Einstein could not patent his celebrated law that  $E=mc^2$ ; nor could Newton have patented the law of gravity." *Ibid.* Nor can one patent "a novel and useful mathematical formula," *Flook*, 437 U.S. at 585, 198 USPQ at 195; electromagnetism or steam power, *O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 113-114 (1853); or "[t]he qualities of \* \* \* bacteria, \* \* \* the heat of the sun, electricity, or the qualities of metals," *Funk*, 333 U.S. at 130, 76 USPQ at 281; see *Le Roy*, 55 U.S. (14 How.) at 175.

While abstract ideas, natural phenomena, and laws of nature are not eligible for patenting, methods and products employing abstract ideas, natural phenomena, and laws of nature to perform a real-world function may well be. In evaluating whether a claim meets the requirements of section 101, the claim must be considered as a whole

to determine whether it is for a particular application of an abstract idea, natural phenomenon, or law of nature, rather than for the abstract idea, natural phenomenon, or law of nature itself.

**Determine Whether the Claimed Invention Covers Either a § 101 Judicial Exception or a Practical Application of a § 101 Judicial Exception**

The Examiner must ascertain the scope of the claim to determine whether it covers either a § 101 judicial exception or a practical application of a § 101 judicial exception. The conclusion that a particular claim includes a § 101 judicial exception does not end the inquiry because “[i]t is now commonplace that an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.” Diehr, 450 U.S. at 187, 209 USPQ at 8 (emphasis in original); accord Flook, 437 U.S. at 590, 198 USPQ at 197; Benson, 409 U.S. at 67, 175 USPQ at 675. Thus, “[w]hile a scientific truth, or the mathematical expression of it, is not a patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be.” Diehr, 450 U.S. at 188, 209 USPQ at 8-9 (quoting Mackay, 306 U.S. at 94); see also Corning v. Burden, 56 U.S. (15 How.) 252, 268, 14 L.Ed. 683 (1854)(“It is for the discovery or invention of some practical method or means of producing a beneficial result or effect, that a patent is granted . . .”).

In light of the rejection under 35 USC Section 112, second paragraph, and in light of the specification, it appears that the applicant is directing the invention to a sales method. Assuming this is correct, the Examiner asserts that the applicant’s invention is directed to creating offers based on sales history data and the quantified impact of a plurality of elements of value from a performance models and thus is an abstract idea.

The Examiner now must determine if the applicant's invention is a particular application of an abstract idea.

**Determine Whether the Claimed Invention is a Practical Application of an Abstract Idea, Law of Nature, or Natural Phenomenon (§ 101 Judicial Exceptions)**

For claims including such excluded subject matter to be eligible, the claim must be for a practical application of the abstract idea, law of nature, or natural phenomenon. Diehr, 450 U.S. at 187, 209 USPQ at 8 (“application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”); Benson, 409 U.S. at 71, 175 USPQ at 676 (rejecting formula claim because it “has no substantial practical application”).

To satisfy section 101 requirements, the claim must be for a practical application of the § 101 judicial exception, which can be identified in various ways:

- (a). The claimed invention “transforms” an article or physical object to a different state or thing.
- (b) The claimed invention otherwise produces a useful, concrete and tangible result, based on the factors discussed below.

**a. Practical Application by Physical Transformation**

The applicant's invention does not transform an article or physical object to a different state or thing. Transferring goods allows the goods to remain in the same state, albeit allowing them to change physical locations.

**b. Practical Application That Produces a Useful, Concrete, and Tangible Result**

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For eligibility analysis, physical transformation "is not an invariable requirement, but merely one example of how a mathematical algorithm [or law of nature] may bring about a useful application." AT&T, 172 F.3d at 1358-59, 50 USPQ2d at 1452. Since the Examiner determined that the claims do not entail the transformation of an article, the Examiner must review the claim to determine if the claim provides a practical application that produces a useful, tangible and concrete result. In determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is "useful, tangible and concrete." The claim must be examined to see if it includes anything more than a § 101 judicial exception. If the claim is directed to a practical application of the § 101 judicial exception producing a result tied to the physical world that does not preempt the judicial exception, then the claim meets the statutory requirement of 35 U.S.C. § 101. If the examiner does not find such a practical application, the examiner has determined that the claim is nonstatutory. In determining whether a claim provides a practical application that produces a useful, tangible, and concrete result, the examiner considers and weighs the following factors:

### **"USEFUL RESULT"**

For an invention to be "useful" it must satisfy the utility requirement of section 101. The USPTO's official interpretation of the utility requirement provides that the utility of an invention has to be (i) specific, (ii) substantial and (iii) credible. MPEP § 2107 and



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Fisher, 421 F.3d at \_\_\_, 76 USPQ2d at 1230 (citing the Utility Guidelines with approval for interpretation of "specific" and "substantial").

The Examiner asserts that the applicant's invention has a specific, substantial and credible result and thus produces a useful result.

### **"TANGIBLE RESULT"**

The tangible requirement does not necessarily mean that a claim must either be tied to a particular machine or apparatus or must operate to change articles or materials to a different state or thing. However, the tangible requirement does require that the claim must recite more than a § 101 judicial exception, in that the process claim must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77 (invention ineligible because had "no substantial practical application."). "[A]n application of a law of nature or mathematical formula to a ... process may well be deserving of patent protection." Diehr, 450 U.S. at 187, 209 USPQ at 8 (emphasis added); see also Corning, 56 U.S. (15 How.) at 268, 14 L.Ed. 683 ("It is for the discovery or invention of some practical method or means of producing a beneficial result or effect, that a patent is granted . . ."). In other words, the opposite meaning of "tangible" is "abstract."

The Examiner asserts that the method claim does not produce a real-world result, or beneficial effect and thus has no substantial application.

### **"CONCRETE RESULT"**

Another consideration is whether the invention produces a “concrete” result. Usually, this question arises when a result cannot be assured. In other words, the process must have a result that can be substantially repeatable or the process must substantially produce the same result again. In re Swartz, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000) (where asserted result produced by the claimed invention is “irreproducible” claim should be rejected under section 101). The opposite of “concrete” is unrepeatable or unpredictable. Resolving this question is dependent on the level of skill in the art.

The Examiner asserts that the applicant’s invention is not repeatable or predictable. The invention is directed to quantifying an impact of a plurality of elements of value and sub-elements of value . The results of the invention cannot be assured since trying to quantify an impact is not assured.

**Determine Whether the Claimed Invention Preempts an Abstract Idea, Law of Nature, or Natural Phenomenon (§ 101 Judicial Exceptions)**

Even when a claim applies a mathematical formula, for example, as part of a seemingly patentable process, the examiner must ensure that it does not in reality “seek[] patent protection for that formula in the abstract.” Diehr, 450 U.S. at 191, 209 USPQ at 10. “Phenomena of nature, though just discovered, mental processes, abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work.” Benson, 409 U.S. at 67, 175 USPQ at 675. One may not patent a process that comprises every “substantial practical application” of an abstract idea, because such a patent “in practical effect would be a patent on the [abstract idea] itself.”

Benson, 409 U.S. at 71-72, 175 USPQ at 676; cf. Diehr, 450 U.S. at 187, 209 USPQ at 8 (stressing that the patent applicants in that case did "not seek to pre-empt the use of [an] equation," but instead sought only to "foreclose from others the use of that equation in conjunction with all of the other steps in their claimed process"). "To hold otherwise would allow a competent draftsman to evade the recognized limitations on the type of subject matter eligible for patent protection." Diehr, 450 U.S. at 192, 209 USPQ at 10. Thus, a claim that recites a computer that solely calculates a mathematical formula (see Benson) or a computer disk that solely stores a mathematical formula is not directed to the type of subject matter eligible for patent protection.

### ***Conclusion***

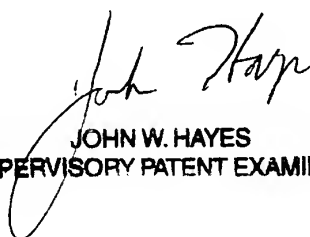
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freda A. Nelson whose telephone number is (571) 272-7076. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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FAN 06/26/06



**JOHN W. HAYES**  
**SUPERVISORY PATENT EXAMINER**



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/746,673	12/24/2003	Jeff Scott Eder	VM-62	3740
53787 7590 01/23/2007 ASSET TRUST, INC. 2020 MALTBY ROAD SUITE 7362 BOTHELL, WA 98021			EXAMINER NELSON, FREDA ANN	
			ART UNIT	PAPER NUMBER
			3628	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/23/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/746,673

Applicant(s)

EDER, JEFF SCOTT

Examiner

Freda A. Nelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 23-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 23-32 is/are rejected.
- 7) ☐ Claim(s) 1-8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

The amendment received on October 22, 2006 is acknowledged and entered. Claims 1, 3, 6-7, 9-12, 15, 23 and 29 have been amended. Claims 17-22 have been canceled. No claims have been added. Claims 1-16 and 23-32 are currently pending.

***Response to Amendments and Arguments***

Applicant's arguments filed October 22, 2006 have been fully considered but they are not persuasive.

In response to applicant's arguments that the examiner has failed to establish a prima facie case that the specification does meet the requirements of 35 U.S.C. 112, first paragraph, the examiner respectfully disagrees. The applicant still has not provided the examiner with areas in specification detailing how the performance model quantifies an impact of a plurality of elements of value and sub-elements of value.

In response to the applicant's arguments that the invention produces results that are a tangible, and concrete and useful, the examiner respectfully disagrees. The Examiner asserts that the applicant's invention is not repeatable or predictable because the invention is directed to quantifying an impact of a plurality of elements of value and sub-elements of value, wherein the results of the invention cannot be assured since trying to quantify an impact is not assured; and the Examiner asserts that the method claim does not produce a real-world result, or beneficial effect and thus has no substantial application.

The Affidavit under 37 CFR 1.132 filed October 22, 2006 is insufficient to overcome the rejection of claims 1-16 and 23-32 are based upon insufficiency of disclosure under 35 U.S.C. 112, first paragraph as set forth in the last Office action because:

It include(s) statements which amount to an affirmation that the claimed subject matter functions as it was intended to function. This is not relevant to the issue of nonobviousness of the claimed subject matter and provides no objective evidence thereof. See MPEP § 716.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 1-16 and 23-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The examiner is still unable to determine how the performance model quantifies an impact of a plurality of elements of value and sub-elements of value on a value of the business.



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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 3-6, 8-13, 23, 25-28 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "customer value" in line 13. There is insufficient antecedent basis for this limitation in the claim.

As for claim 1, the examiner is unable to determine what the applicant is claiming by the claim language "basket-sub" in line 9.

As for claim 1, the examiner is unable to determine what the applicant is claiming by the claim language "SKU" in lines 8-9 and 14-15, respectively.

As for claim 1, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU" in lines 9 and 14, respectively.

As for claim 1, the examiner is unable to determine how a business purchases a basket of SKUs.

Claim 3 recites the limitation "the contents" in line 5. There is insufficient antecedent basis for this limitation in the claim.

As for claim 4, the examiner is unable to determine what the applicant is claiming by the claim language "CCU" or "LCD causal association algorithm" in line 4.

As for claim 4, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU's" in line 5.

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Claim 5 recites the limitation "the group" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the group" in line. There is insufficient antecedent basis for these limitations in the claim.

Claim 6 is incomplete.

Claim 9 recites the limitation "customer value" in line 14. There is insufficient antecedent basis for this limitation in the claim.

As for claim 9, the examiner is unable to determine what the applicant is claiming by the claim language "SKU's" in lines 12-13, respectively.

As for claim 9, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU's" in line 13.

As for claim 9, the examiner is unable to determine how a business purchases a basket of SKU's.

As for claim 9, the examiner is unable to determine what the applicant is claiming by the claim language "basket-sub" in line 16.

Claim 9 recites the limitation "the group" in line 18. There is insufficient antecedent basis for this limitation in the claim.

As for claims 10-16, the examiner is unable to determine if the applicant is claiming a computer readable medium or a method.

Claim 10 recites the limitation "the method" in line 4. There is insufficient antecedent basis for this limitation in the claim.

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Claim 11 recites the limitation "the method" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the method" in line 4. There is insufficient antecedent basis for this limitation in the claim.

As for claim 12, the examiner is unable to determine what the applicant is claiming by the claim language "CCU" or "LCD causal association algorithm" in line 3.

As for claim 12, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU's" in line 4.

Claim 13 recites the limitation "the group" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "the group" in line 3. There is insufficient antecedent basis for this limitation in the claim.

As for claim 14, the examiner is unable to determine what the applicant is claiming by the claim language "SKU" in lines 4-5.

As for claim 14, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU" and "causal SKU discount" in line 4.

Claim 23 recites the limitation "customer value" in line 12. There is insufficient antecedent basis for this limitation in the claim.

As for claim 23, the examiner is unable to determine what the applicant is claiming by the claim language "basket-sub" in line 13.

As for claim 23, the examiner is unable to determine how a business purchases a basket of SKUs.

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As for claim 25, the examiner is unable to determine what the applicant is claiming by the claim language "SKU's" in line 5.

As for claim 26, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU's" in lines 4 and 5-6, respectively.

As for claim 26, the examiner is unable to determine what the applicant is claiming by the claim language "CCU" or "LCD causal association algorithm" in line 5.

As for claim 28, the examiner is unable to determine what the applicant is claiming by the claim language "SKU's" in lines 3-5.

As for claim 28, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU" and "causal SKU discount" in lines 3-4.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. See detailed discussion below.

As the Supreme Court held, Congress chose the expansive language of 35 U.S.C. § 101 so as to include "anything under the sun that is made by man." *Diamond v. Chakrabarty*, 447 U.S. 303, 308-09, 206 USPQ 193, 197 (1980). In *Chakrabarty*, 447 U.S. at 308-309, 206 USPQ at 197, the court stated:

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In choosing such expansive terms as “manufacture” and “composition of matter,” modified by the comprehensive “any,” Congress plainly contemplated that the patent laws would be given wide scope. The relevant legislative history also supports a broad construction. The Patent Act of 1793, authored by Thomas Jefferson, defined statutory subject matter as “any new and useful art, machine, manufacture, or composition of matter, or any new or useful improvement [thereof].” Act of Feb. 21, 1793, ch. 11, § 1, 1 Stat. 318. The Act embodied Jefferson’s philosophy that “ingenuity should receive a liberal encouragement.” V Writings of Thomas Jefferson, at 75-76. See *Graham v. John Deere Co.*, 383 U.S. 1, 7-10 (148 USPQ 459, 462-464) (1966). Subsequent patent statutes in 1836, 1870, and 1874 employed this same road language. In 1952, when the patent laws were recodified, Congress replaced the word “art” with “process,” but otherwise left Jefferson’s language intact. The Committee Reports accompanying the 1952 Act inform us that Congress intended statutory subject matter to “include anything under the sun that is made by man.” S. Rep. No. 1979, 82d Cong., 2d Sess., 5 (1952); H.R. Rep. No. 1923, 82d Cong., 2d Sess., 6 (1952). [Footnote omitted]

This perspective has been embraced by the Federal Circuit:

The plain and unambiguous meaning of section 101 is that any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may be patented if it meets the requirements for patentability set forth in Title 35, such as those found in sections 102, 103, and 112. The use of the expansive term “any” in section 101 represents Congress’s intent not to place any restrictions on the subject matter for which a patent may be obtained beyond those specifically recited in section 101 and the other parts of Title 35.... Thus, it is improper to read into section 101 limitations as to the subject matter that may be patented where the legislative history does not indicate that Congress clearly intended such limitations.

*Alappat*, 33 F.3d at 1542, 31 USPQ2d at 1556.

35 U.S.C. § 101 defines four categories of inventions that Congress deemed to be the appropriate subject matter of a patent: processes, machines, manufactures and compositions of matter.

Federal courts have held that 35 U.S.C. § 101 does have certain limits. First, the phrase “anything under the sun that is made by man” is limited by the text of 35 U.S.C.

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§ 101, meaning that one may only patent something that is a machine, manufacture, composition of matter or a process. See, e.g., *Alappat*, 33 F.3d at 1542, 31 USPQ2d at 1556; *In re Warmerdam*, 33 F.3d 1354, 1358, 31 USPQ2d 1754, 1757 (Fed. Cir. 1994). Second, 35 U.S.C. § 101 requires that the subject matter sought to be patented be a "useful" invention. Accordingly, a complete definition of the scope of 35 U.S.C. § 101, reflecting Congressional intent, is that any new and useful process, machine, manufacture or composition of matter under the sun that is made by man is the proper subject matter of a patent.

The subject matter courts have found to be outside of, or exceptions to, the four statutory categories of invention is limited to abstract ideas, laws of nature and natural phenomena. These three exclusions recognize that subject matter that is not a practical application or use of an idea, a law of nature or a natural phenomenon is not patentable. See, e.g., *Rubber-Tip Pencil Co. v. Howard*, 87 U.S. (20 Wall.) 498, 507 (1874) ("idea of itself is not patentable, but a new device by which it may be made practically useful is"); *Mackay Radio & Telegraph Co. v. Radio Corp. of America*, 306 U.S. 86, 94, 40 USPQ 199, 202 (1939) ("While a scientific truth, or the mathematical expression of it, is not patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be."); *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759 ("steps of 'locating' a medial axis, and 'creating' a bubble hierarchy . . . describe nothing more than the manipulation of basic mathematical constructs, the paradigmatic 'abstract idea'").

The courts have also held that a claim may not preempt ideas, laws of nature or natural phenomena. The concern over preemption was expressed as early as 1852. See *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 175 (1852) ("A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right."); *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 132, 76 USPQ 280, 282 (1948) (combination of six species of bacteria held to be nonstatutory subject matter). Accordingly, one may not patent every "substantial practical application" of an idea, law of nature or natural phenomena because such a patent "in practical effect be a patent on the [idea, law of nature or natural phenomena] itself." *Gottschalk v. Benson*, 409 U.S. 63, 71-72, 175 USPQ 673, 676 (1972).

A claim that requires one or more acts to be performed defines a process. The applicant's invention is directed to a method or a process and thus falls within an enumerated statutory class.

However, not all processes are statutory under 35 USC Section 101. To be statutory, a claimed process must either: (A) result in a physical transformation which a practical application is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application which produces a useful, tangible, and concrete result. See *Diehr*, 450 U.S. at 183-84, 209 USPQ at 6.

Upon making the determination that the invention is a method or process that falls within an enumerated statutory class, the Examiner must now determine whether the claimed invention falls within one of the Section 101 judicial exceptions, i.e., is the

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invention directed to laws of nature, natural phenomena or an abstract idea. Moreover, in evaluating whether the claims meet the requirements of section 101, the Supreme Court requires the Examiner to consider the claims as a whole to determine whether the invention is for a particular application of an abstract idea, rather than an abstract idea itself.

**Exceptions: Laws of nature, natural Phenomena and Abstract Ideas:**

Inventions directed to nothing more than abstract ideas (such as mathematical algorithms), natural phenomena, and laws of nature are not eligible and therefore are excluded from patent protection. *Diehr*, 450 U.S. at 185, 209 USPQ at 7; accord, e.g., *Chakrabarty*, 447 U.S. at 309, 206 USPQ at 197; *Parker v. Flook*, 437 U.S. 584, 589, 198 USPQ 193, 197 (1978); *Benson*, 409 U.S. at 67-68, 175 USPQ at 675; *Funk*, 333 U.S. at 130, 76 USPQ at 281. "A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right." *Le Roy*, 55 U.S. (14 How.) at 175. Instead, such "manifestations of laws of nature" are "part of the storehouse of knowledge," "free to all men and reserved exclusively to none." *Funk*, 333 U.S. at 130, 76 USPQ at 281.

Thus, "a new mineral discovered in the earth or a new plant found in the wild is not patentable subject matter" under Section 101. *Chakrabarty*, 447 U.S. at 309, 206 USPQ at 197. "Likewise, Einstein could not patent his celebrated law that  $E=mc^2$ ; nor could Newton have patented the law of gravity." *Ibid*. Nor can one patent "a novel and useful mathematical formula," *Flook*, 437 U.S. at 585, 198 USPQ at 195; electromagnetism or



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steam power, *O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 113-114 (1853); or "[t]he qualities of \*\*\* bacteria, \*\*\* the heat of the sun, electricity, or the qualities of metals," *Funk*, 333 U.S. at 130, 76 USPQ at 281; see *Le Roy*, 55 U.S. (14 How.) at 175.

While abstract ideas, natural phenomena, and laws of nature are not eligible for patenting, methods and products employing abstract ideas, natural phenomena, and laws of nature to perform a real-world function may well be. In evaluating whether a claim meets the requirements of section 101, the claim must be considered as a whole to determine whether it is for a particular application of an abstract idea, natural phenomenon, or law of nature, rather than for the abstract idea, natural phenomenon, or law of nature itself.

**Determine Whether the Claimed Invention Covers Either a § 101 Judicial Exception or a Practical Application of a § 101 Judicial Exception**

The Examiner must ascertain the scope of the claim to determine whether it covers either a § 101 judicial exception or a practical application of a § 101 judicial exception. The conclusion that a particular claim includes a § 101 judicial exception does not end the inquiry because "[i]t is now commonplace that an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection." *Diehr*, 450 U.S. at 187, 209 USPQ at 8 (emphasis in original); accord *Flook*, 437 U.S. at 590, 198 USPQ at 197; *Benson*, 409 U.S. at 67, 175 USPQ at 675. Thus, "[w]hile a scientific truth, or the mathematical expression of it, is not a patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be." *Diehr*, 450 U.S. at 188, 209 USPQ at 8-9 (quoting *Mackay*, 306 U.S. at 94); see also *Corning v. Burden*, 56 U.S. (15 How.) 252, 268, 14 L.Ed. 683 (1854) ("It is

for the discovery or invention of some practical method or means of producing a beneficial result or effect, that a patent is granted . . .").

In light of the rejection under 35 USC Section 112, second paragraph, and in light of the specification, it appears that the applicant is directing the invention to a sales method. Assuming this is correct, the Examiner asserts that the applicant's invention is directed to creating offers based on sales history data and the quantified impact of a plurality of elements of value from a performance models and thus is an abstract idea. The Examiner now must determine if the applicant's invention is a particular application of an abstract idea.

**Determine Whether the Claimed Invention is a Practical Application of an  
Abstract Idea, Law of Nature, or Natural Phenomenon (§ 101 Judicial  
Exceptions)**

For claims including such excluded subject matter to be eligible, the claim must be for a practical application of the abstract idea, law of nature, or natural phenomenon. *Diehr*, 450 U.S. at 187, 209 USPQ at 8 ("application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection."); *Benson*, 409 U.S. at 71, 175 USPQ at 676 (rejecting formula claim because it "has no substantial practical application").

To satisfy section 101 requirements, the claim must be for a practical application of the § 101 judicial exception, which can be identified in various ways:

- (a). The claimed invention "transforms" an article or physical object to a

different state or thing.

(b) The claimed invention otherwise produces a useful, concrete and tangible result, based on the factors discussed below.

**a. Practical Application by Physical Transformation**

The applicant's invention does not transform an article or physical object to a different state or thing. Transferring goods allows the goods to remain in the same state, albeit allowing them to change physical locations.

**b. Practical Application That Produces a Useful, Concrete, and Tangible Result**

For eligibility analysis, physical transformation "is not an invariable requirement, but merely one example of how a mathematical algorithm [or law of nature] may bring about a useful application." AT&T, 172 F.3d at 1358-59, 50 USPQ2d at 1452. Since the Examiner determined that the claims do not entail the transformation of an article, the Examiner must review the claim to determine if the claim provides a practical application that produces a useful, tangible and concrete result. In determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is "useful, tangible and concrete." The claim must be examined to see if it includes anything more than a § 101 judicial exception. If the claim is directed to a practical application of the § 101 judicial exception producing a result tied to the physical world that does not preempt the judicial exception, then the claim meets the statutory requirement of 35 U.S.C. § 101. If the examiner does not find such

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a practical application, the examiner has determined that the claim is nonstatutory. In determining whether a claim provides a practical application that produces a useful, tangible, and concrete result, the examiner considers and weighs the following factors:

### **“USEFUL RESULT”**

For an invention to be “useful” it must satisfy the utility requirement of section 101. The USPTO’s official interpretation of the utility requirement provides that the utility of an invention has to be (i) specific, (ii) substantial and (iii) credible. MPEP § 2107 and Fisher, 421 F.3d at \_\_\_, 76 USPQ2d at 1230 (citing the Utility Guidelines with approval for interpretation of “specific” and “substantial”).

The Examiner asserts that the applicant’s invention has a specific, substantial and credible result and thus produces a useful result.

### **“TANGIBLE RESULT”**

The tangible requirement does not necessarily mean that a claim must either be tied to a particular machine or apparatus or must operate to change articles or materials to a different state or thing. However, the tangible requirement does require that the claim must recite more than a § 101 judicial exception, in that the process claim must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77 (invention ineligible because had “no substantial practical application.”). “[A]n application of a law of nature or mathematical formula to a ... process may well be deserving of patent protection.”

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Diehr, 450 U.S. at 187, 209 USPQ at 8 (emphasis added); see also Corning, 56 U.S. (15 How.) at 268, 14 L.Ed. 683 ("It is for the discovery or invention of some practical method or means of producing a beneficial result or effect, that a patent is granted . . ."). In other words, the opposite meaning of "tangible" is "abstract."

The Examiner asserts that the method claim does not produce a real-world result, or beneficial effect and thus has no substantial application.

### **"CONCRETE RESULT"**

Another consideration is whether the invention produces a "concrete" result. Usually, this question arises when a result cannot be assured. In other words, the process must have a result that can be substantially repeatable or the process must substantially produce the same result again. In re Swartz, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000) (where asserted result produced by the claimed invention is "irreproducible" claim should be rejected under section 101). The opposite of "concrete" is unrepeatable or unpredictable. Resolving this question is dependent on the level of skill in the art.

The Examiner asserts that the applicant's invention is not repeatable or predictable. The invention is directed to quantifying an impact of a plurality of elements of value and sub-elements of value. The results of the invention cannot be assured since trying to quantify an impact is not assured.

### **Determine Whether the Claimed Invention Preempts an Abstract Idea, Law of Nature, or Natural Phenomenon (§ 101 Judicial Exceptions)**

Even when a claim applies a mathematical formula, for example, as part of a seemingly patentable process, the examiner must ensure that it does not in reality "seek[] patent protection for that formula in the abstract." Diehr, 450 U.S. at 191, 209 USPQ at 10. "Phenomena of nature, though just discovered, mental processes, abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work." Benson, 409 U.S. at 67, 175 USPQ at 675. One may not patent a process that comprises every "substantial practical application" of an abstract idea, because such a patent "in practical effect would be a patent on the [abstract idea] itself." Benson, 409 U.S. at 71-72, 175 USPQ at 676; cf. Diehr, 450 U.S. at 187, 209 USPQ at 8 (stressing that the patent applicants in that case did "not seek to pre-empt the use of [an] equation," but instead sought only to "foreclose from others the use of that equation in conjunction with all of the other steps in their claimed process"). "To hold otherwise would allow a competent draftsman to evade the recognized limitations on the type of subject matter eligible for patent protection." Diehr, 450 U.S. at 192, 209 USPQ at 10. Thus, a claim that recites a computer that solely calculates a mathematical formula (see Benson) or a computer disk that solely stores a mathematical formula is not directed to the type of subject matter eligible for patent protection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

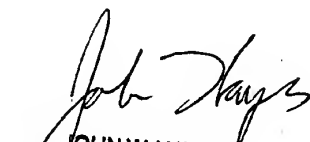
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freda A. Nelson whose telephone number is (571) 272-7076. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3628

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FAN 01/08/07



JOHN W. HAYES  
SUPERVISORY PATENT EXAMINER





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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/746,673	12/24/2003	Jeff Scott Eder	VM-62	3740
53787 7590 02/27/2007 ASSET TRUST, INC. 2020 MALTBY ROAD SUITE 7362 BOTHELL, WA 98021			EXAMINER NELSON, FREDA ANN	
			ART UNIT 3628	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/27/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/746,673	EDER, JEFF SCOTT	
	Examiner	Art Unit	
	Freda A. Nelson	3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 23-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 23-32 is/are rejected.
- 7) ☒ Claim(s) 2, 6 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

The amendment received on February 16, 2007 is acknowledged and entered. Claims 1, 4, 9-10, 12, 16, 23-24, 26, and 30-31 have been amended. No claims have been added. Claims 1-16 and 23-32 are currently pending.

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 16, 2007 has been entered.

### ***Claim Objections***

Claims 2, 6, and 8 are objected to because of the following informalities:

Claims 2 and 8, respectively, should be "Currently amended"; and

Claim 6 is incomplete.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 1-16 and 23-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The examiner is still unable to determine how the performance model quantifies an impact of a plurality of elements of value and sub-elements of value on a value of the business.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 3-6, 8-13, 23, 25-28 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As for claim 1, the examiner is unable to determine what the applicant is claiming by the claim language "basket-sub" in line 11.

As for claim 1, the examiner is unable to determine what the applicant is claiming by the claim language "SKU" in lines 8-9 and 18-19, respectively.

As for claim 1, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU" in lines 9 and 18, respectively.

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As for claim 1, the examiner is unable to determine how a business purchases a basket of SKUs.

As for claim 4, the examiner is unable to determine what the applicant is claiming by the claim language "CCU" or "LCD causal association algorithm" in line 4.

Claim 4 recites the limitation "the correlated, correlated, uncorrelated causal association test" group" in lines 3-4 and 4-5, respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the group" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the group" in line. There is insufficient antecedent basis for these limitations in the claim.

Claim 6 is incomplete.

As for claim 9, the examiner is unable to determine what the applicant is claiming by the claim language "SKU's" in lines 8-9, respectively.

As for claim 9, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU's" in line 9.

As for claim 9, the examiner is unable to determine how a business purchases a basket of SKU's.

As for claim 9, the examiner is unable to determine what the applicant is claiming by the claim language "basket-sub" in line 11.

Claim 9 recites the limitation "the group" in line 18. There is insufficient antecedent basis for this limitation in the claim.

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As for claims 10-16, the examiner is unable to determine if the applicant is claiming a computer readable medium or a method.

As for claim 12, the examiner is unable to determine what the applicant is claiming by the claim language "CCU" or "LCD causal association algorithm" in line 2.

As for claim 12, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU's" in line 3.

Claim 13 recites the limitation "the group" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "the group" in line 3. There is insufficient antecedent basis for this limitation in the claim.

As for claim 14, the examiner is unable to determine what the applicant is claiming by the claim language "SKU" in lines 4-5.

As for claim 14, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU" and "causal SKU discount" in line 2.

Claim 23 recites the limitation "customer value" in line 12. There is insufficient antecedent basis for this limitation in the claim.

As for claim 23, the examiner is unable to determine what the applicant is claiming by the claim language "basket-sub" in line 13.

As for claim 23, the examiner is unable to determine how a business purchases a basket of SKUs.

As for claim 25, the examiner is unable to determine what the applicant is claiming by the claim language "SKU's" in line 3.

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As for claim 26, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU's" in lines 4 and 5-6, respectively.

Claim 26 recites the limitation "the correlated, correlated, uncorrelated causal association test" group" in lines 4-5 and 5-6, respectively. There is insufficient antecedent basis for this limitation in the claim.

As for claim 26, the examiner is unable to determine what the applicant is claiming by the claim language "CCU" or "LCD causal association algorithm" in line 2.

As for claim 28, the examiner is unable to determine what the applicant is claiming by the claim language "SKU's" in lines 3-5.

As for claim 28, the examiner is unable to determine what the applicant is claiming by the claim language "causal SKU" and "causal SKU discount" in lines 2-3.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. § 101 reads as follows:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

3. Claims 10-16 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

35 USC 101 requires that in order to be patentable the invention must be a "new and useful process, machine, manufacture, or composition of matter, or any new and

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useful improvement thereof" (emphasis added). Applicant's claims mentioned above are intended to embrace or overlap *two* different statutory classes of invention as set forth in 35 USC 101. The claims begin by discussing a computer readable medium (ex. preamble of claims 10-16) and the body of the claim discusses the specifics of the method (see above rejection of claims under 35 USC 112, second paragraph, for specific details regarding this issue). "A claim of this type is precluded by the express language of 35 USC 101 which is drafted so as to set forth the statutory classes of invention in the alternative only", Ex parte Lyell (17 USPQ2d 1548).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freda A. Nelson whose telephone number is (571) 272-7076. The examiner can normally be reached on Monday - Friday.

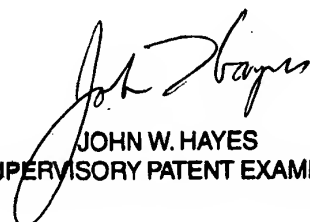
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JOHN W. HAYES  
SUPERVISORY PATENT EXAMINER

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Application Number	10/746,673
Filing Date	12/24/2003
First Named Inventor	Jeff S. Eder
Art Unit	3629
Examiner Name	Freda Nelson
Attorney Docket Number	AR - 62

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		Number-Kind Code <sup>2</sup> (if known)			
FN		US- 20040172319 -A1	09-02-2004	Eder, Jeff	
FN		US- 20060143115 -A1	06-29-2006	Eder, Jeff	
FN		US- 20060184449 -A1	08-17-2006	Eder, Jeff	
FN		US- 20010041996 -A1	11-15-2001	Eder, Jeff	
FN		US- 20020046143 -A1	04-18-2002	Eder, Jeff	
FN		US- 20040088239 -A1	05-06-2004	Eder, Jeff	
FN		US- 20040193503 -A1	09-30-2004	Eder, Jeff	
FN		US- 20040199445 -A1	10-07-2004	Eder, Jeff	
FN		US- 20040215495 -A1	10-28-2004	Eder, Jeff	
FN		US- 20040215522 -A1	10-28-2004	Eder, Jeff	
FN		US- 20040225629 -A1	11-11-2004	Eder, Jeff	
FN		US- 20040236621 -A1	11-25-2004	Eder, Jeff	
FN		US- 20040236673 -A1	11-25-2004	Eder, Jeff	
FN		US- 20050071266 -A1	03-31-2005	Eder, Jeff	
FN		US- 20050119900 -A1	06-02-2005	Eder, Jeff	
FN		US- 20050119919 -A1	06-02-2005	Eder, Jeff	
FN		US- 20050119922 -A1	06-02-2005	Eder, Jeff	
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FN		US- 20050251468 -A1	11-10-2005	Eder, Jeff	

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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

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Signature

/Freda Nelson/

Date  
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		Number-Kind Code <sup>2</sup> (if known)			
FN		US- 6,453,297 - B1	2-15-2000	Burks, James	
FN		US- 5,761,442 - B1	6-02-1998	Barr, Dean	
FN		US- 5,638,492 - B1	6-10-1997	Maeda, et al.	
FN		US- 6,324,553 - B1	11-27-2001	Agrawal et al.	
FN		US- 6,330,564 - B1	12-11-2001	Hellerstein et al.	
FN		US- 5,887,120 - B1	3-23-1999	Wical, Kelly	
FN		US- 6,909,708 - B1	6-21-2005	Krishnaswamy et al.	
FN		US- 6,321,205 - B1	11-20-2001	Eder, Jeff	
FN		US- 6,393,406 - B1	5-21-2002	Eder, Jeff	
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FN		US- 20010034268 -A1	10-25-2001	Eder, Jeff	
FN		US- 20010034686 -A1	10-25-2001	Eder, Jeff	
FN		US- 20030083793 -A1	5-01-2003	Horsfall, Peter	
FN		US- 5,191,522 - B1	3-03-1993	Bosco, James	
FN		US- 6,249,768 - B1	6-19-2001	Tulskie, William	
FN		US- 5,471,611 - B1	11-28-1995	McGregor, Douglas	
FN		US- 6,026,397 - B1	2-15-2000	Sheppard, Colin	
FN		US- 6,347,306 - B1	2-12-2002	Swart, Marius	
FN		US- 6,546,381 - B1	4-8-2003	Subramanian, Narayan	

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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		WO 983588	02-28-1997	Mayon & White		

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Signature

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		Number-Kind Code <sup>2</sup> (if known)			
FN		US- 5,406,477 - B1	6-06-2000	Harhen, John	
FN		US- 5,644,727 - B1	9-21-2004	Atkins, Charles Agee	
FN		US- 5,704,045 - B1	12-30-1997	King, Douglas	
FN		US- 5,680,305 - B1	10-21-1997	Agpar, Mahlon	
FN		US- 6,064,971 - B1	08-29-2000	Hartnett, William	
FN		US- 6,876,992 - B1	04-05-2005	Sullivan, Andrew	
FN		US- 6,301,584 - B1	09-09-2001	Ranger, Denis	
FN		US- 6,189,011 - B1	02-13-2001	Lim, Peter	
FN		US- 6,738,753 - B1	05-18-2004	Hogan, Michael	
FN		US- 6,363,314 - B1	07-17-2001	Donner, Irah	
FN		US- 6,810,429 - B1	10-26-2004	Walsh, Thomas	
FN		US- 6,418,448 - B1	07-09-2002	Sarkar, Shyam Sundar	
FN		US- 6,209,124 - B1	03-27-2001	Vermiere, Dean	
FN		US- 6,366,934 - B1	04-02-2002	Cheng, Josephine	
FN		US- 6,584,507 - B1	06-24-2003	Bradley, Karen	
FN		US- 6,282,531 - B1	08-28-2001	Haughton, John	
FN		US- 6,064,972 - B1	05-16-2000	Jankowitz, Charles	
FN		US- 6,078,901 - B1	06-20-2000	Ching, Hugh	
FN		US- 5,706,495 - B1	01-06-1998	Chadha, Atul	

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Considered

02/20/2007

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/746,673
Filing Date	12/24/2003
First Named Inventor	Jeff S. Eder
Art Unit	3629
Examiner Name	Freda Nelson
Attorney Docket Number	AR - 62

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
FN		EVEREST, GORDON, Database Management Systems, 1986, McGraw Hill	
FN		SIEGEL, JEREMY, "The Noisy Market Hypothesis", Dow Jones, 6/14/2006	
FN		MEHRDAD, BAGHAI et al, The Alchemy of Growth, 1999, Perseus Books	
FN		APPRAISAL STANDARDS BOARD, "Uniform standards of professional appraisal practice", 1997	
FN		DELOITTE, Valuing Intangible Assets, January 2006	
FN		MAUBOUSSIN, MICHAEL, Get Real, June 23, 1999, CSFB	
FN		FARQUHAR, PETER et al, Recognizing and measuring brand assets, 1989, Marketing Science Institute	

Examiner Signature	/Freda Nelson/	Date Considered	02/20/2007
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9189 (1-800-766-9189) and select option 2.

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*(Use as many shoots as necessary)*

Application Number	10/746,673
Filing Date	12/24/2003
First Named Inventor	Jeff S. Eder
Art Unit	3628
Examiner Name	Freda Nelson
Attorney Docket Number	AR - 62

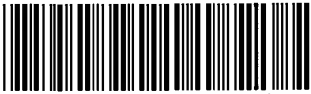
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

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178

# Index of Claims



Application/Control No.

10/746,673

Examiner

Freda A. Nelson

Applicant(s)/Patent under Reexamination

EDER, JEFF SCOTT

Art Unit

3628

✓	Rejected
=	Allowed

—	(Through numeral) Cancelled
+	Restricted

N	Non-Elected
I	Interference

A	Appeal
O	Objected

Claim		Date									
Final	Original	2/20/07									
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/746,673	12/24/2003	Jeff Scott Eder	VM-62	3740
53787	7590	11/20/2007		
ASSET TRUST, INC. 2020 MALTBY ROAD SUITE 7362 BOTHELL, WA 98021				
			EXAMINER NELSON, FREDA ANN	
			ART UNIT 3628	PAPER NUMBER
			MAIL DATE 11/20/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/746,673	EDER, JEFF SCOTT	
	Examiner	Art Unit	
	Freda A. Nelson	3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 23-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 23-32 is/are rejected.
- 7) ☐ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 3628

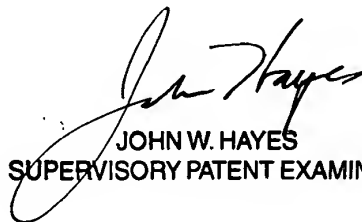
In view of the Appeal Brief filed on July 15, 2007, PROSECUTION IS  
HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of  
the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a  
reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31  
followed by an appeal brief under 37 CFR 41.37. The previously paid notice of  
appeal fee and appeal brief fee can be applied to the new appeal. If, however,  
the appeal fees set forth in 37 CFR 41.20 have been increased since they were  
previously paid, then appellant must pay the difference between the increased  
fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening  
prosecution by signing below:

  
JOHN W. HAYES  
SUPERVISORY PATENT EXAMINER

### **DETAILED ACTION**

The Appeal Brief received on July 15, 2007 is acknowledged and entered. Claim 17 has been amended. Claims 17-22 have been canceled. No claims have been added. Claims 1-16 and 23-32 are currently pending.

#### ***Claim Objections***

1. Claim 16 is objected to because of the following informalities:

Claim 16, line 1, "claim 1" should be "claim 10".

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 4, 6, 12 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1, the examiner is unable to determine from the claim language "optionally completing a sales transaction", if the potential customer or the business completes the transaction.

As per claims 4, 12, and 26, the claim language of "CCU or LCD causal" could be written as to define the scope of the invention more clearly. For

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example, applicant should use "Correlation Continuous Unlearning (CCU)" and Local Causal Discovery (LCD).

Claim 6 recites the limitation "the choice" in line 4. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5-10, 13-16, 23-24, and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders (US Patent Number 6,411,936), in view of Batachia et al. (US Patent Number 7,103,580).

As per claims 1, 9, and 23, Sanders discloses:

(a) obtaining a plurality of sales history data and a computer implemented performance model for a business with at least one sub-element of customer value, wherein the performance model quantifies an impact of a plurality of elements of value and sub-elements of value on a value of the business by category of value where the categories of value are selected from the group consisting of current operation, market sentiment and combinations thereof (see FIGS. 5, 7, and 12),

(b) identifying one or more baskets of sku's typically purchased from the business and one or more associated causal sku's for each basket for each of one or more sub-elements of customer value by analyzing at least a portion of the sales history data (col. 14, lines 61-65),

(c) creating an offer for each basket-sub element of customer value combination that is optimized for a business value context (col. 9, lines 1-17), and

(d) obtaining information that identifies a sub-element of customer value for a potential customer (col. 7, lines 41-65).

Sanders does not expressly disclose (e) presenting an optimized offer for said sub-element of customer value to the potential customer using an interactive sales process where said offer further comprises a combination of one or more facets selected from the group consisting of a causal sku, a causal sku discount, a vendor selection for each sku in the basket, an expected delivery date for each sku in the basket and combinations thereof.

However, Batachia et al. discloses one desirable characteristic (especially in electronic commerce applications) for intelligent agents is that of efficiency, wherein agents should try to maximize the number of deals at the best conditions (price, utility value, etc.) for their clients (col. 3, lines 13-17). Batachia et al. further discloses when the agent receives an offer (570), the agent evaluates it (575), and then generates the counter-offer it intends to propose in accordance with the particular mechanism that it has implemented (580); and the agent then evaluates the generated counter-offer. If the score of the received offer is

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greater or equal than the score of the offer it intend to propose (585, 586)), the agent may accept the offer and send an ACCEPT message to the opponent agent (590), thus successfully completing the negotiation thread (560).

Otherwise, the agent proposes the new generated counter-offer (587, 595) (col. 9, lines 36-46; FIG. 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Sanders to include the feature of Batachia in order to provide the user the ability to analyze optimal prices in order to negotiate and complete offers between businesses and customers through the Internet.

As per claims 2, 10, and 24 Sanders does not expressly disclose the method of claims 1, 9, and 23 further comprising: optionally completing a sales transaction.

However, Batachia et al. disclose one desirable characteristic (especially in electronic commerce applications) for intelligent agents is that of efficiency, wherein agents should try to maximize the number of deals at the best conditions (price, utility value, etc.) for their clients (col. 3, lines 13-17). Batachia et al. further discloses when the agent receives an offer (570), the agent evaluates it (575), and then generates the counter-offer it intends to propose in accordance with the particular mechanism that it has implemented (580); and the agent then evaluates the generated counter-offer. If the score of the received offer is greater or equal than the score of the offer it intend to propose (585, 586)), the

Art Unit: 3628

agent may accept the offer and send an ACCEPT message to the opponent agent (590), thus successfully completing the negotiation thread (560).

Otherwise, the agent proposes the new generated counter-offer (587, 595) (col. 9, lines 36-46; FIG. 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Sanders to include the feature of Batachia in order to provide the user the ability to negotiate and complete offers between businesses and customers through the Internet.

As per claims 5, 13-14, and 27-28, Sanders discloses the method, computer readable medium, and system of claims 1, 9, and 23 where a plurality of elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, equipment, intellectual property, investors, partnerships, processes, production equipment, vendors, vendor relationships and combinations thereof and where the categories of value are selected from the group consisting of current operation, real option, market sentiment and combinations thereof (col. 5, lines 36-56; col. 7, lines 41-65; FIGS 5, 11-12).

As per claim 6, Sanders discloses the method, computer readable medium, and system of claims 1, 9, and 23 where a business value context is defined by attributes selected from the group consisting of a sub-element of customer value, a sub element of customer value retention rate, a supply chain

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status, a vendor history, one or more the elements of value affected by the choice of facets, one or more categories of value affected by the choice of facets and combinations thereof (col. 13, line 66-col. 14, line 9).

As per claim 7, 15, and 29, Sanders discloses the method, computer readable medium, and system of claims 1, 9, and 23 where an offer that is optimized for a business value context further comprises an offer that maximizes business value (see claims 19, 23-24, and 37).

As per claims 8, 16, and 30, Sanders does not expressly disclose 16. (Previously presented) The method of claim 1 wherein an interactive sales process is selected from the group consisting of web enabled sales, sales from on-line exchanges, telemarketing and combinations thereof.

4. Claims 3, 11 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders (US Patent Number 6,411,936), in view of Batachia et al. (US Patent Number 7,103,580), still in further view of Ozden et al. (US Patent number 6,278,998).

As per claims 3, 11, and 25, Sanders does not expressly disclose the method of claims 1, 9, and 23 wherein the method further comprises using an apriori algorithm to determine a content of each of one or more baskets.

However, Ozden et al. discloses one major application domain of data mining is in the analysis of transactional data, wherein this application database



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system records include information about user transactions, where each transaction is a collection of items; and in this setting, association rules capture inter-relationships between various items. An association rule captures the notion of a set of items occurring together in transactions. For example, in a database maintained by a supermarket, an association rule might be of the form "beer.fwdarw.chips (3%, 87%)," which means that 3% of all database transactions contain the items beer and chips, and 87% of the transactions that have the item "beer" also have the item "chips" in them (col. 1, lines 39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Sanders to include the feature of Batachia et al. and Ozden et al. in order to analyze the items purchased during transactions to increase profitability.

5. Claims 4, 12 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders (US Patent Number 6,411,936) in view of Batachia et al. (US Patent Number 7,103,580), still in further in view of "Scalable Techniques for mining causal Structures" (hereinafter referred to as "Scalable Techniques").

As per claim 4, 12, and 26, Sanders does not expressly disclose the methods of claim 1 and 23 wherein the method further comprises using a CCU or LCD causal association algorithm to identify one or more causal sku's for each basket where the CCU causal association algorithm completes the a correlated, correlated, uncorrelated causal association test and the a LCD causal

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association algorithm completes the a correlated, correlated, correlated causal association test.

However, "Scalable Techniques" discloses that if *B* and *C* become dependent when conditioned on *A*, then by the Markov condition they cannot be descendants of *A*, so we conclude that *B* and *C* are causes of *A*. This observation gives rise to the *CCU rule*, so named since two variable pairs are correlated and one is uncorrelated (see page 598, paragraph 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Sanders to include the feature of Batachià et al. and "Scalable Techniques" in order to determine causal relationships to prevent pricing errors.

### ***Conclusion***

6. The examiner has cited prior art of interest, for example:

- 1) Mack, Ann M, "Choose Me", April 2000, Brandweek, pg. 106 , 1 pg.
- 2) Ostroff et al. (US PG Pub. 2002/0013782), which disclose a software program for Internet information retrieval, analysis and presentation.
- 3) Kant et al. (US Patent Number 6,173,276), which disclose a system and method for financial instrument modeling and valuation.
- 4) Abe et al. (US PG Pub. 2002/0046128), which disclose an automatic pricing method and device.

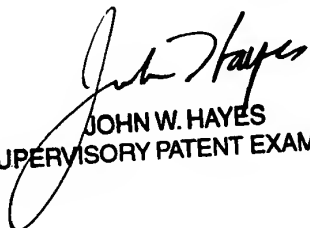
Art Unit: 3628

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freda A. Nelson whose telephone number is (571) 272-7076. The examiner can normally be reached on Monday - Wednesday and Friday, 10:00 AM -6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FAN 11/13/2007



JOHN W. HAYES  
SUPERVISORY PATENT EXAMINER

<b>Notice of References Cited</b>	Application/Control No. 10/746,673	Applicant(s)/Patent Under Reexamination EDER, JEFF SCOTT	
	Examiner Freda A. Nelson	Art Unit 3628	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,029,139	02-2000	Cunningham et al.	705/10
*	B	US-2002/0013782	01-2002	Ostroff et al.	707/10
*	C	US-2002/0046128	04-2002	Abe et al.	705/26
*	D	US-6,173,276	01-2001	Kant et al.	706/50
*	E	US-6,278,998	08-2001	Ozden et al.	707/6
*	F	US-6,411,936	06-2002	Sanders, Aaron M.	705/10
*	G	US-7,103,580	09-2006	Batachia et al.	705/80
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title, Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Mack, Ann M., "Choose Me", April 2000, Brandweek, pg. 106 , 1 pg.
	V	Silverstein et al., "Scalable techniques for Mining Causal Structures", Fall 1998, Proceedings of the 24 <sup>th</sup> VLDB Conference, New York, Pgs 594-605, 12 pgs..
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10 747, 171	12/29/2003	Jeff Seon Eder	VM-63	5816
53782 7596 02/14/2008 ASSET TRUST, INC. 2020 MALTBY ROAD SUITE 7362 BOTHELL, WA 98021			EXAMINER DADIL BEHRANI	
			ART UNIT 3694	PAPER NUMBER
			MAIL DATE 02/14/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10747,471

Applicant(s)

EDER, JEFF SCOTT

Examiner

BEHRANG BADII

Art Unit

3694

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 55-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 55-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/22/07
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Claims 55-57 have been examined.

P = paragraph, e.g. p5 = paragraph 5.

### ***Election/Restrictions***

Applicant's election without traverse of claims 55-57 in the reply filed on 11/8/07 is acknowledged.

The requirement is still deemed proper and is therefore made FINAL. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claims 30-54 are hereby withdrawn from further consideration.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant's wording of claim 55 is indefinite and unclear. For example the statement "organization risk by segment of value, element of value, external factor risk and risk by learning from at least a portion of said data" is unclear. Further the statement "where the model of organization value and risk analyzes the portfolio effect associated with organization elements of value, organization external factors and organization risks and where the model of organization value and risk supports the development and dissemination of financial statements that detail

organization value and risk by segment of value, element of value, organization and risk" is unclear.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkins, USP 5,864,828, and further in view of Lee, USPAP 2005/0187866.

As per claims 55, Atkins discloses a method for integrating organization systems into an overall financial management system, comprising integrating and converting data from a plurality of organization related systems using metadata mapping, developing a model of organization value and organization risk by segment of value, element of value, external factor and risk by learning from at least a portion of said data, identifying one or more changes in operation that will optimize one or more aspects of organization financial performance using said matrices, and implementing said changes in operation by communicating the changes to one or more organization systems where the model of organization value and risk analyzes the portfolio effect associated with organization elements of value, organization external factors and organization risks (abstract, fig's 2-6). Atkins does not disclose where the model of organization value and risk supports the development and dissemination of financial statements that detail organization value and risk by segment of value, element of value, organization and



risk. Lee discloses where the model of organization value and risk supports the development and dissemination of financial statements that detail organization value and risk by segment of value, element of value, organization and risk (p 58, claim 11, abstract). It would have been obvious to modify Atkins to include where the model of organization value and risk supports the development and dissemination of financial statements that detail organization value and risk by segment of value, element of value, organization and risk such as that taught by Lee in order to carry out a risk/credit analyses to better ascertain the risk of the asset in question (p58).

As per claim 56, Atkins further discloses where one or more aspects of organization financial performance are selected from the group consisting of alliance risk, brand risk, channel risk, content risk, contingent liabilities, customer risk, customer relationship risk, current operation risk, derivative risk, employee risk, employee relationship risk, energy risk, enterprise risk, external factor risk, event risk, information technology risk, intellectual capital risk, intellectual property risk, investment risk, knowledge risk, market sentiment risk, market risk, market volatility, organization risk, partnership risk, process risk, production equipment risk, product risk, real option risk, technology risk, vendor risk, vendor relationship risk, weather risk, alliance value, brand value, capital value, channel value, content value, contingent liabilities, customer value, customer relationship value, current operation value, derivative value, employee value, employee relationship value, enterprise value, expense value, external factor value, event value, information technology value, intellectual capital value, intellectual property value, investment value, knowledge value, market sentiment value, market value,

market volatility, organization value, partnership value, process value, production equipment value, product value, real option value, revenue value, technology value, vendor value, vendor relationship value and combinations thereof (abstract, fig's 2-6).

As per claim 57, Atkins further discloses where developing a model of organization value and organization risk by learning from at least a portion of said data further comprises completing a series of multivariate analyses in an automated manner (abstract, fig's 2-6).

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Behrang Badli whose telephone number is 571-272-6879. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 571-272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Any response to this action should be mailed to:**

Application/Control Number: 10/747,471  
Art Unit: 3694

Page 6

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Any inquiry of a general nature or relating to the status of this application  
or proceeding should be directed to the Technology Center 3600 Customer Service  
Office whose telephone number is (571) 272-3600.

Behrang Badli  
Patent Examiner  
Art Unit 3694

BB

/James P Trammell/  
Supervisory Patent Examiner, Art Unit 3694

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substantiate for form 1449-PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		<b>Complete if Known</b>			
		Application Number	10/747,471		
		Filing Date	12/29/2003		
		First Named Inventor	Jeff S. Eder		
		Art Unit	3694		
		Examiner Name	Ella Colbert		
Sheet		of		Attorney Docket Number	AR - 63

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
BB		BALLOW, JOHN; BURGMAN, ROLAND; BURGOZ, SCOTT; "Enhanced Business Reporting"; October 2004, pages 1 - 30, Asset Economics, U.S.A.	
BB		CHAROENROOK, ANCHANDA; "Does Sentiment Matter?"; December 2003, pages 1 - 44, Financial Management Association International, U.S.A.	
BB		BANDOPADHYAYA, ARINDAM, JONES, ANNE LEAH; "Measuring investor sentiment in equity markets"; February 2006, v7, pages 208 - 215, Journal Asset Management, U.S.A.	
BB		PHYSORG.COM, "How much information is too much information?"; pages 1 - 2, February 15, 2005, PHYSORG.COM, University of Queensland, Australia	
B/B		YANG, BO et al, BP Neural Network Optimization based on an improved genetic algorithm, November 4, 2002, pages 64 - 68, Proceedings for the First International Conference on Machine Learning and Cybernetics Beijing, China, IEEE, U.S.A.	

Examiner Signature	<i>Michael H. ...</i>	Date Considered	2/11/08
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,504	04/09/2004	Jeff Scott Eder	AR - 65	9808
53787 7590 08/09/2007 ASSET TRUST, INC. 2020 MALTBY ROAD SUITE 7362 BOTHELL, WA 98021			EXAMINER CHENCINSKI, SIEGFRIED E	
			ART UNIT 3692	PAPER NUMBER
			MAIL DATE 08/09/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/821,504

Applicant(s)

EDER, JEFF SCOTT

Examiner

Siegfried E. Chencinski

Art Unit

3692

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 101-105 and 122-138 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 101-105 and 122-138 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**1. Claims 101-105 & 122-138 are rejected** because the claimed invention is directed to non-statutory subject matter. The claims are not directed to any one of the areas of patentable subject matter, such as product, process, process of making or composition.

For a claim to be statutory under 35 USC 101 the following two conditions must be met:

1) In the claim, the practical application of an algorithm or idea results in a useful, concrete, tangible result,

According to the above guidelines, Applicant's claims are limited to the manipulation of abstract ideas in the context of patentability.

Applicant is advised to satisfy the statutory requirements for the claims. Applicant is also advised not to add any new matter to the specification or the claims.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**2. Claims 101-105 & 122-138 are rejected under 35 U.S.C. 112, first paragraph,** as failing to comply with the enablement requirement. The claim(s) contains subject

matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The invention contains numerous parameters which are subject to subjective judgment so that an ordinary practitioner would be unable to implement the invention

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**3. Claim 101-105 & 122-138 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**4. Claims 101-105 & 122-138 are rejected under 35 U.S.C. 112, second paragraph**, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are the steps needed to introduce objective measures such that two independent practitioners of the art could produce the same results. As it stands, the results of the invention cannot be duplicated in two independent implementations due to the many subjective judgments which have to be made in implementing the invention.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the



invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**5. Claims 101 – 104, 122 & 131 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Myrick et al. (US Patent 7,162,427 B1) in view of Chavez et al. (US patent 6,684,193 B1, hereafter Chavez).

**Re. Claims 101, 122 & 131,** Myrick discloses an enterprise architecture for a business divided into a business architecture, an information technology architecture, and an enterprise management framework. The business architecture is the main driver for the information technology architecture but the information technology architecture can also have an impact on the construction of the business architecture. The enterprise management framework allows for the management of the two architectures. A framework tower is built around essential and mandatory components of the enterprise architecture. The framework tower is made up of a plurality of planes representing mandatory components of the enterprise architecture. The components of the framework tower include a strategic plan, a business architecture, an information architecture, an application architecture, a technology infrastructure architecture, and an enterprise information technology management framework. Each component in the framework tower addresses the people, processes, and technology of the enterprise architecture so that strategic information technology planning, enterprise architecture definition, and repeatable and effective information technology enabling solutions can be performed and delivered to the business. (Abstract).

Thusly, Lewis discloses a method, system and storage device for integrating organization systems into an overall financial management system, comprising

- integrating data from a plurality of organization related systems (inherent in Myrick's disclosure and as represented by the Abstract),
- developing a computational model of organization market value (Fig. 1, Col. 4, ll. 27-28) that identifies one or more drivers of an organization share price by a category of value using at least a portion of said data (the share price is implicit in the market of the enterprise, since the share price is a simple function of total value divided by the outstanding number of shares),

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- identifying one or more changes in operation that will optimize organization share price using said model (implicit in strategic planning), and
- implementing said changes in operation by communicating the changes to one or more organization systems where the drivers of organization share price are selected from the group consisting of elements of value, external factors, risks and combinations thereof (implicit in strategic plans).

Therefore it would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention to have combined the disclosure of Myrick with conclusions which would have been obviousness to the practitioner to design a method, system and storage device for integrating organization systems into an overall financial management system, motivated by a desire to provide a business with a foundation framework or structure that allows the business architecture to drive the technology architecture and also allow the technology architecture to have a direct impact on the construction of the business architecture through enablement or providing new and creative ways of conducting business (Myrick, Col. 1, ll. 34-40).

Re. Claims 102, 123, 125 & 133, Myrick discloses a computational model of organization market value which identifies a contribution to a market value for a plurality of elements of value for each of one or more categories of value where the elements of value are selected from the group consisting of customers (Fig. 12A), information technology, processes, production equipment, other elements and combinations thereof and where a category of value is selected from the group consisting of current operation and other factors (Abstract).

Re. Claims 103, 124, 126 & 134, Myrick discloses wherein a computational model of organization market value is developed in an automated fashion by completing a series of analyses where the analyses are selected from the group consisting of identifying one or more previously unknown item performance indicators, discovering one or more previously unknown value drivers, identifying one or more previously unknown relationships between one or more value drivers, identifying one or more previously

unknown relationships between one or more elements of value, quantifying one or more inter-relationships between value drivers, quantifying one or more impacts between elements of value, developing one or more composite variables, developing one or more vectors, developing one or more causal element of value impact summaries, identifying a best fit combination of predictive model algorithm and element impact summaries for modeling enterprise market value and each of the components of value, building one or more predictive models using transaction data, determining a net element of value impact for each category of value, determining a relative strength of the elements of value between two or more enterprises, developing one or more real option discount rates, calculating one or more real option values, calculating an enterprise market sentiment value by element of value, developing a covariance matrix, developing a series of scenarios, simulating a financial performance under a given scenario and combinations thereof.

Re. Claims 104, 127 & 135, Myrick discloses where organization related systems are selected from the group consisting of basic financial systems, other systems and combinations thereof (Abstract, Fig's 1-21).

**6. Claims 105, 128, 129, 130, 136-138 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Myrick et al. (US Patent 7,162,427 B1) in view of Chavez et al. (US patent 6,684,193 B1, hereafter Chavez).

**Re. Claims 105, 128 & 136,** Myrick does not explicitly disclose changes in operation which are selected from the group consisting of changes in purchase quantities, changes in purchasing mix, changes in risk transfer, changes in vendors, changes in purchase discounts, changes in product discounts, changes in product pricing, changes in service pricing, changes in service discounts, changes in supply chain management, changes in organization equity holdings, changes in operating limits for organization systems and combinations thereof. However, Chavez discloses a model for the multivariate allocation of resources based on value functions which includes changes in numerous business

variables (Col. 2, l. 53 – Col. 5, l. 30), including purchasing and supply variables (Col. 8, l. 66 – Col. 9, l. 37). Therefore, It would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention to have combined the a method, system and storage device disclosed by Myrick with the disclosure of Chavez in order to integrate organization systems into an overall financial management system method, system and storage device which includes changes in various business parameters including purchasing, motivated by a desire to introduce a solution to the recurring problem of large scale manufacturing processes in the allocation of valuable resources to meet uncertain consumer demand (Chavez, Col. 1, ll. 15-18).

**Re. Claims 129, 130, 137 & 138**, Myrick discloses a system and storage device including that of risk management (DETX 112) and risk assessment, DETX 219). Myrick does not explicitly disclose re. Claim 129, a computational model of organization market value identifies an impact of a plurality of risks on each of one or more categories of value where a category of value is selected from the group consisting of current operation, real option, market sentiment and combinations thereof and where a plurality of risks are selected from the group consisting of event risks, contingent liabilities, volatility and combinations thereof; nor claim 130, wherein identifying an impact of a plurality of risks on each of one or more categories of value further comprises quantifying a risk contribution from each of one or more elements of value and each of one or more external factors for each category of value where the elements of value are selected from the group consisting of alliances, brands, customers, customer relationships, employees, employee relationships, infrastructure, intellectual property, information technology, partnerships, processes, production equipment, vendors, vendor relationships and combinations thereof. However, Chavez discloses more details in the evaluation of risks, including an optimization step which "leads into the element identified as sensitivities/scenarios/results 324. This element produces results such as risk management insights, and the like. Risk management insights 326 include such factors as product/revenue upside, component gating risk, product interaction effects, intercomponent gating risk, and flex levels. Product/revenue upside considers how such factors increase (or affect) overall revenues. Gating risks consider the effects

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of allocating components towards one product versus another. Interaction effects consider the influence of one product over another (in competing for resources, sales, and the like). (Col. 9, l. 62 – Col. 10, l. 6).

It would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention to have combined the method, system and storage device disclosed by Myrick with the disclosure of Chavez in order to integrate organization systems into an overall financial management system method, system and storage device which includes identification of the impact of a plurality of risks and the quantification of risk exposures by elements of value and external factors for each risk category, motivated by a desire to introduce a solution to the recurring problem of large scale manufacturing processes in the allocation of valuable resources to meet uncertain consumer demand (Chavez, Col. 1, ll. 15-18).

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Siegfried Chencinski whose telephone number is (571)272-6792. The Examiner can normally be reached Monday through Friday, 9am to 6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kambiz Abdi, can be reached on (571) 272-6702.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Art Unit: 3692

***Commissioner of Patents and Trademarks, Washington D.C. 20231***

or Faxed to (571)273-8300 [Official communications; including After Final communications labeled "Box AF"]

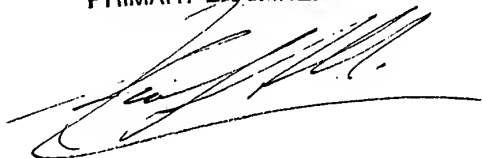
or Faxed to (571) 273-6792 [Informal/Draft communications, labeled "PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to the address found on the above USPTO web site in Alexandria, VA.

SEC

August 6, 2009

ABDI  
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to be 'Abdi', written over the printed name 'ABDI' and title 'PRIMARY EXAMINER'.

<b>Notice of References Cited</b>	Application/Control No. 10/821,504	Applicant(s)/Patent Under Reexamination EDER, JEFF SCOTT	
	Examiner Siegfried E. Chencinski	Art Unit 3692	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-7,162,427	01-2007	Myrick et al.	705/1
*	B	US-6,684,193	01-2004	Chavez et al.	705/8
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
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	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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	V	
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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/262,146	10/28/2005	Jeffrey Scott Eder	AR-77	8784

7590 01/31/2007  
Jeff S. Eder  
19108 30th Drive SE  
Mill Creek, WA 98012

EXAMINER

PATS, JUSTIN

ART UNIT	PAPER NUMBER
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3623

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/31/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.



## Office Action Summary

Application No.

11/262,146

Applicant(s)

EDER, JEFFREY SCOTT

Examiner

Justin M. Pats

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11/11/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/01/2006, 1/19/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Priority***

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has complied with the conditions for receiving the benefit of Application 10/237,021, filed September 9, 2002 and is hereby accorded this earlier effective filing date.

***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1–13 are rejected under 35 U.S.C. 101 as being non-statutory because the invention claimed does not produce a tangible result. “The claimed invention as a whole must accomplish a practical application. That is, it must produce a useful, concrete, and tangible result.” See MPEP § 2106, Sec. II.A. The claimed invention must possess a certain level of “real world” value. *Id.*

First, the claims are useful: they are (1) specific in their application to context searching not just generic data; (2) substantial in that context search data is not just a throwaway calculation or something that can be used only for future research; and (3) credible in that this data can be prioritized. Second, the claims are concrete in that the result does look repeatable and predictable.

However, the claims do not produce a tangible real world result. The methods merely aggregate, analyze, identify, and present data. A computer is not required to completely do each and every step of these claims. The results, e.g., prioritized data, could be nothing more than thoughts from a mental calculation.

Note that claims 14–20 elude a rejection under 35 U.S.C. 101 because they are directed to a system with physical components, namely computers, processors, and storage devices.

*Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1–20 are rejected under 35 U.S.C. 102(b) as being anticipated by Ruszczyk, U.S. Patent No. 6,205,150. (see attached PTO-892, reference A).

6. As per claim 1, Ruszczyk teaches a context search method, comprising: aggregating data related to an entity in accordance with a common schema (Ruszczyk, col. 4, lines 36–37, “data packets with a variety of priorities from lower priority to higher priority”); analyzing at least a portion of said data as required to identify an entity context and one or more priorities for said entity given said context (Ruszczyk, col. 4, lines 53–55, “first network device 20 determines a scheduling priority for data packets located in the first queue”); identifying data, information and knowledge that is relevant to said entity context (Ruszczyk, col. 5, lines 44–47, “The scheduler determines the weight of a data packet by using the transmission deadline and size of the data packet, and the apparent backlog of other data packets in the queue”); and presenting at least one of relevant data, relevant information or relevant knowledge after sorting said data, information or knowledge on the basis of the entity context relevancy and priorities (Ruszczyk, col. 5, lines 65–67, col. 6, lines 1–5, “A sorter 60 determines whether a data packet in combination queue 58 is a higher priority data packet, and if so sorter 60 inserts the higher priority data into a high priority queue 62. Router then schedules the data packets in high priority queue 62 using a

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guaranteed scheduling method 64 scheduler and sends the high priority data packets to a transmitter 72 for execution in the order determined by guaranteed scheduler 64”).

7. As per claim 2, Ruszczyk teaches the method of claim 1 as described above. Ruszczyk further teaches the method wherein an entity context further comprises one or more aspects of context selected from the group consisting of physical, tactical, instant, organization, mission, social environment, lexical, time and combinations thereof (Ruszczyk, col. 4, line 54, “scheduling priority”. Examiner notes here that because applicant has used the alternative expression “selected from the group consisting of”, only one member of the group needs to be present for the method to fully operate or the system to be complete. Thus, Examiner has chosen to examine the member ‘time’. ).

8. As per claim 3, Ruszczyk teaches the method of claim 1 as described above. Ruszczyk further teaches the method wherein one or more priorities are defined by one or more mission measures (Ruszczyk, col. 3, lines 36–39, “Thus, it is desirable to develop scheduling methods to prevent higher types-of-service from starving out transmission requests from customers of lower types-of-services”).

9. As per claim 4, Ruszczyk teaches the method of claim 1 as described above. Ruszczyk further teaches the method wherein one or more mission measures further comprise one or more quantifiable measures (Ruszczyk, col. 6, lines 22–26, “[T]he present invention prevents lower priority data packets from being starved out of transmission bandwidth by higher priority data packets while guaranteeing that higher priority data packets are satisfied such as providing the contracted bandwidth”. Maintenance of bandwidth is considered a quantifiable measure)

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10. As per claim 5, Rusczyk teaches the method of claim 1 as described above. Rusczyk further teaches the method wherein one or mission measures further comprise measures selected from the group consisting of a time measure, a transaction measure, a financial measure, a physical measure, a satisfaction measure and combinations thereof (*id.* Examiner has chosen to examine 'time measure'. As such, Rusczyk teaches bandwidth as a time measure relating to a mission measure.)

11. As per claim 6, Rusczyk teaches the method of claim 1 as described above. Rusczyk further teaches the method wherein an entity context is developed by learning from the data (Rusczyk, col. 5, lines 44–47, “The scheduler determines the weight of a data packet by using the . . . size of the data packet, and the apparent backlog of other data packets in the queue”).

12. As per claim 7, Rusczyk teaches a program storage device readable by machine, tangibly embodying a program of instructions executable by a machine to perform method steps for performing a context search method, the method steps comprising: aggregating data related to an entity in accordance with a common schema, analyzing at least a portion of said data as required to identify an entity context and one or more priorities for said entity given said context, identifying a plurality of data, information and knowledge that is relevant to said entity context, and presenting the relevant data, information and knowledge after it is sorted on the basis of entity context relevancy and priorities (Rusczyk, col. 6, lines 33–40; *see discussion supra* ¶ 6).

13. As per claim 8, Rusczyk teaches the program storage device of claim 7 as described above. Rusczyk further teaches the device wherein an entity context further comprises one or more aspects of context selected from the group consisting of physical, tactical, instant,

organization, mission, social environment, lexical, time and combinations thereof (*see* discussion *supra* ¶ 7).

14. As per claim 9, Ruszczyk teaches the program storage device of claim 7 as described above. Ruszczyk further teaches the device wherein one or more priorities are defined by one or more mission measures (*see* discussion *supra* ¶ 8).

15. As per claim 10, Ruszczyk teaches the program storage device of claim 7 as described above. Ruszczyk further teaches the device wherein one or more mission measures further comprise one or more quantifiable measures (*see* discussion *supra* ¶ 9).

16. As per claim 11, Ruszczyk teaches the program storage device of claim 7 as described above. Ruszczyk further teaches the device wherein one or mission measures further comprise measures selected from the group consisting of a time measure, a transaction measure, a financial measure, a physical measure, a satisfaction measure and combinations thereof (*see* discussion *supra* ¶ 10).

17. As per claim 12, Ruszczyk teaches the program storage device of claim 7 as described above. Ruszczyk further teaches the device wherein one or more priorities for an entity are identified in an automated manner by learning from that data (*see* discussion *supra* ¶ 11).

18. As per claim 13, Ruszczyk teaches the program storage device of claim 7 as described above. Ruszczyk further teaches the device wherein an entity is selected from the group consisting of individual, a team, a division, an organization, an organization combination and combinations thereof (Ruszczyk, col. 2, lines 46–47, “various customers on the network system will transmit and receive both high priority and low priority packets”).

19. As per claim 14, Ruszczyk teaches a context search system comprising: networked computers each with a processor having circuitry to execute instructions (Ruszczyk, Fig. 1); a storage device available to each processor with sequences of instructions stored therein (*id.*), which when executed cause the processors to: (a) aggregate data related to an entity in accordance with a common schema, (b) analyze at least a portion of said data as required to identify an entity context and one or more priorities for said entity given said context, (c) identify a plurality of data, information and knowledge that is relevant to said entity context, and (d) presenting at least one of the relevant data, relevant information and relevant knowledge in an order defined by an entity context relevancy and priorities (*see discussion supra* ¶ 6).

20. As per claim 15, Ruszczyk teaches the system of claim 14 as described above. Ruszczyk further teaches the system wherein an entity context further comprises one or more aspects of context selected from the group consisting of physical, tactical, instant, organization, mission, social environment, lexical, time and combinations thereof (*see discussion supra* ¶ 7).

21. As per claim 16, Ruszczyk teaches the system of claim 14 as described above. Ruszczyk further teaches the system wherein one or more priorities are defined by one or more mission measures (*see discussion supra* ¶ 8).

22. As per claim 17, Ruszczyk teaches the system of claim 14 as described above. Ruszczyk further teaches the system wherein one or more mission measures further comprise any quantifiable measure (*see discussion supra* ¶ 9).

23. As per claim 18, Ruszczyk teaches the system of claim 14 as described above. Ruszczyk further teaches the system wherein one or mission measures further comprise measures selected



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from the group consisting of a time measure, a transaction measure, a financial measure, a physical measure, a satisfaction measure and combinations thereof (*see* discussion *supra* ¶ 10).

24. As per claim 19, Ruszczyk teaches the system of claim 14 as described above. Ruszczyk further teaches the system wherein identifying data, information and knowledge that is relevant to an entity context further comprises the development of indices for aspects of context selected from the group consisting of physical, tactical, instant, organization, mission, social environment, lexical, temporal and combinations thereof (Ruszczyk, Fig. 4, refs. 64, 68, data packets are indexed via guaranteed and weighted round robin schedulers based on their priority).

25. As per claim 20, Ruszczyk teaches the system of claim 14 as described above. Ruszczyk further teaches the system wherein an entity is selected from the group consisting of individual, a team, a division, an organization, an organization combination and combinations thereof (*see* discussion *supra* ¶ 18).


*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M. Pats whose telephone number is 571-270-1363. The examiner can normally be reached on Monday through Friday, 8:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Nolan can be reached on 571-272-0847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

\*\*\*

  
MATTHEW S. GART  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 3600

<b>Notice of References Cited</b>	Application/Control No. 11/262,146		Applicant(s)/Patent Under Reexamination EDER, JEFFREY SCOTT	
	Examiner Justin M. Pats		Art Unit 3623	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,205,150	03-2001	Ruszczyk, Chester A.	370/412
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
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	M	US-			


**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
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	P					
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	S					
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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a))  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<b>Index of Claims</b>  	<b>Application/Control No.</b>  11262146	<b>Applicant(s)/Patent Under Reexamination</b>  EDER, JEFFREY SCOTT
	<b>Examiner</b>  Pats, Justin M	<b>Art Unit</b>  3623

✓	<b>Rejected</b>	-	<b>Cancelled</b>	N	<b>Non-Elected</b>	A	<b>Appeal</b>
=	<b>Allowed</b>	÷	<b>Restricted</b>	I	<b>Interference</b>	O	<b>Objected</b>

<input type="checkbox"/> Claims renumbered in the same order as presented by applicant			<input type="checkbox"/> CPA			<input type="checkbox"/> T.D.			<input type="checkbox"/> R.1.47		
CLAIM		DATE									
Final	Original	01/24/2007									
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	2	✓									
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<b>Search Notes</b>  	<b>Application/Control No.</b>  11262146	<b>Applicant(s)/Patent Under Reexamination</b>  EDER, JEFFREY SCOTT
	<b>Examiner</b>  Pats, Justin M	<b>Art Unit</b>  3623

<b>SEARCHED</b>			
<b>Class</b>	<b>Subclass</b>	<b>Date</b>	<b>Examiner</b>
705	+	1/24/07	Justin M Pats

<b>SEARCH NOTES</b>		
<b>Search Notes</b>	<b>Date</b>	<b>Examiner</b>
See EAST search	1/24/07	Justin M Pats

<b>INTERFERENCE SEARCH</b>			
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Bib Data Sheet

CONFIRMATION NO. 8784

<b>SERIAL NUMBER</b> 11/262,146	<b>FILING OR 371(c) DATE</b> 10/28/2005 <b>RULE</b>	<b>CLASS</b> 705	<b>GROUP ART UNIT</b> 3623	<b>ATTORNEY DOCKET NO.</b> AR-77
<b>APPLICANTS</b> Jeffrey Scott Eder, Mill Creek, WA;				
<b>** CONTINUING DATA *****</b> This application is a CON of 10/237,021 09/09/2002 and claims benefit of 60/522,794 11/08/2004 <i>Jmi</i>				
<b>** FOREIGN APPLICATIONS *****</b> <i>None Jmi</i>				
<b>IF REQUIRED, FOREIGN FILING LICENSE GRANTED **</b> 12/02/2005 <b>** SMALL ENTITY **</b>				
Foreign Priority claimed <input type="checkbox"/> yes <input checked="" type="checkbox"/> no 35 USC 119 (a-d) conditions met <input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Met after Allowance		<b>STATE OR COUNTRY</b> WA	<b>SHEETS DRAWING</b> 16	<b>TOTAL CLAIMS</b> 20
Verified and Acknowledged <i>Jmi</i> Examiner's Signature Initials				<b>INDEPENDENT CLAIMS</b> 3
<b>ADDRESS</b> Jeff S. Eder 19108 30th Drive SE Mill Creek, WA98012				
<b>TITLE</b> Context search system				
<b>FILING FEE RECEIVED</b> 500	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees ( Filing ) <input type="checkbox"/> 1.17 Fees ( Processing Ext. of time ) <input type="checkbox"/> 1.18 Fees ( Issue ) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit	

<b>Search Notes</b> 	<b>Application/Control No.</b> 11262146	<b>Applicant(s)/Patent Under Reexamination</b> EDER, JEFFREY SCOTT
	<b>Examiner</b> Pats, Justin M	<b>Art Unit</b> 3623

<b>SEARCHED</b>			
<b>Class</b>	<b>Subclass</b>	<b>Date</b>	<b>Examiner</b>

<b>SEARCH NOTES</b>		
<b>Search Notes</b>	<b>Date</b>	<b>Examiner</b>
See EAST search	4/30/2007	Justin M Pats

<b>INTERFERENCE SEARCH</b>			
<b>Class</b>	<b>Subclass</b>	<b>Date</b>	<b>Examiner</b>

<b>Notice of References Cited</b>	Application/Control No. 11/262,146	Applicant(s)/Patent Under Reexamination EDER, JEFFREY SCOTT	
	Examiner Justin M. Pats, Esq.	Art Unit 3623	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,327,590	12-2001	Chidlovskii et al.	707/5
*	B	US-6,963,867	11-2005	Ford et al.	707/3
*	C	US-6,249,282	06-2001	Sutcliffe et al.	715/751
	D	US-			
	E	US-			
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	G	US-			
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	M	US-			

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	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



<b>Index of Claims</b> 	<b>Application/Control No.</b> 11262146	<b>Applicant(s)/Patent Under Reexamination</b> EDER, JEFFREY SCOTT
	<b>Examiner</b> Pats, Justin M	<b>Art Unit</b> 3623

✓	<b>Rejected</b>	-	<b>Cancelled</b>	N	<b>Non-Elected</b>	A	<b>Appeal</b>
=	<b>Allowed</b>	÷	<b>Restricted</b>	I	<b>Interference</b>	O	<b>Objected</b>

<input type="checkbox"/> Claims renumbered in the same order as presented by applicant			<input type="checkbox"/> CPA			<input type="checkbox"/> T.D.			<input type="checkbox"/> R.1.47		
CLAIM		DATE									
Final	Original	01/24/2007									
	1	-									
	2	-									
	3	-									
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	17	-									
	18	-									
	19	-									
	20	-									
	21	✓									
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	32	✓									
	33	✓									
	34	✓									
	35	✓									
	36	✓									



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/262,146	10/28/2005	Jeffrey Scott Eder	AR-77	8784
53787	7590	05/11/2007		
ASSET TRUST, INC. 2020 MALTBY ROAD SUITE 7362 BOTHELL, WA 98021				
			EXAMINER PATRICK, ESQ., JUSTIN	
			ART UNIT 3623	PAPER NUMBER
			MAIL DATE 05/11/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

11/262,146

Applicant(s)

EDER, JEFFREY SCOTT

Examiner

Justin M. Pats, Esq.

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Notice to Applicant***

1. The following is a Final, second office action. In response to Applicant's communication of 2/13/07, Applicant has cancelled claims 1–20. Applicant has added claims 20–36. Claims 20–36 are pending in this application and have been rejected below.

***Response to Amendment***

***Claim Rejections - 35 USC § 101***

2. The rejection of claims 1–13 under 35 U.S.C. 101 is hereby withdrawn in light of Applicant's cancellation of these claims.

***Claim Rejections - 35 USC § 102***

3. The rejection of claims 1–20 under 35 U.S.C. 102 is hereby withdrawn in light of Applicant's cancellation of these claims.

*Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 21–36 are rejected under 35 U.S.C. 102(e) as being anticipated by Chidlovskii et al., U.S. Patent No. 6,327,590 [hereinafter Chidlovskii]. (*see* attached PTO-892, 4/30/07, reference A)

6. As per claim 21, Chidlovskii teaches a method of prioritizing search results, comprising: accessing a profile for a user (Chidlovskii, Fig. 2, ref. 50, User Profile); receiving a search query from the user (Chidlovskii, Fig. 2, ref. 102, Query); identifying a set of search result documents that match the search query (Chidlovskii, Fig. 2, ref. 80, META – Search Engine), prioritizing the set of search result documents based on the user profile (Chidlovskii, Fig. 2, ref. 124, Ranked Documents), and displaying a prioritized set of search results to the user (*id.*, see arrow of ranked documents going to the user 100; Fig. 1, refs. 114, 116), where a profile for a user further comprises a user context (Chidlovskii, col. 4, lines 19–22). This rejection also applies to the system of claim 28.

7. As per claim 22, Chidlovskii teaches the method of claim 21 as described above. Chidlovskii further teaches wherein a user is selected from the group consisting of an individual, a group, a team, a division, an organization and combinations thereof (Chidlovskii, Fig. 2, refs. 130, Community, 120, Community Manager, 100, User; col. 4, lines 58—61). This rejection also applies to the system of claim 27 and the computer program product of claim 32.

8. As per claim 23, Chidlovskii teaches the method of claim 21 as described above. Chidlovskii further teaches wherein a user context further comprises a one or more mission measures (Chidlovskii, col. 2, lines 44—46, “Preferably, the context profile is a user profile or a community profile, which includes a hierarchical set of terms that have been rated by the user or community”) and a plurality of administrative context layers where each administrative context layer further comprises one or more components of context (Chidlovskii, col. 2, lines 40—43, “The user’s context profile may include, for example, the user’s identity, the community or set of communities applicable to the search, and the point of view the user wishes to adopt”) where a plurality of administrative context layers are selected from the group consisting of physical, tactical, social environment and combinations thereof (*id.*), and where one or components of context are selected from the group consisting of actions, characteristics, commitments, elements, events, factors, keywords, links, location, transactions and combinations thereof (*id.*). This rejection also applies to the system of claims 29 and 30, and the computer program product of claims 33—35.

9. As per claim 24, Chidlovskii teaches the method of claim 23 as described above.

Chidlovskii further teaches wherein events are selected from the group consisting of prior search queries, prior document reviews, a failure to review documents from prior search queries, prior URL visits, scrolling during prior URL visits, a failure to review URL's from prior search queries, prior transactions and combinations thereof (Chidlovskii, col. 4, lines 47–54, “Additionally, the extended system may include wrappers that allow the profilers to extract document content (or document reference, such as its URL), user, community and rating information from the document collections and wrappers that allow the search pre-processor to submit queries to the search engine and the search post-processor to extract the results.”).

10. As per claim 25, Chidlovskii teaches the method of claim 21 as described above.

Chidlovskii further teaches wherein identifying and ranking a set of search result documents that match a query further comprises: developing a plurality of indices for each of one or more context layers associated with said user (Chidlovskii, col. 9, lines 8–20, describing the relevance formula), and identifying and prioritizing a set of search result documents using one or more of said indices (Chidlovskii, col. 9, line 20–21, “Then, documents are sorted based on their calculated rank values and presented to user). This rejection also applies to the computer program product of claim 36.

11. As per claim 26, Chidlovskii teaches a search engine system, comprising:

one or more central processing units for executing programs (Chidlovskii, Fig. 2, refs. 30, 40); an interface for receiving event messages (Chidlovskii, Fig. 1, refs. 114, 116); and a search engine



module executable by the one or more central processing units (Chidlovskii, Fig. 2, ref. 80), the module comprising instructions for performing a search ranking method, the method steps comprising: aggregating a plurality of user-related data from a plurality of data sources ("The API or the wrapper generates "meta-data" which is used by the profilers to construct and to incrementally update the user and community profiles from the set of documents relevant to the user and in the context of the community."); developing a profile for a user using at least a portion of said data (*id.*), receiving a search query from the user (Chidlovskii, Fig. 2, ref. 102, Query), and identifying and prioritizing a set of search result documents that match the search query (Chidlovskii, Fig. 2, ref. 80, META – Search Engine, ref. 124, Ranked Documents); and displaying a set of prioritized search results using an electronic display where a profile for a user further comprises a user context, and where a user context further comprises one or more mission measures and a plurality of administrative context layers where each administrative context layer further comprises one or more components of context (*id.*, see arrow of ranked documents going to the user 100; Fig. 1, refs. 114, 116. *See also discussion supra ¶ claim 23*) This rejection also applies to the computer program product of claim 31.

12. Claims 27, 28, 29, 30, 31, 32, 33, 34, 35, and 36 recite substantially similar limitations to claims 22, 21, 23, 23, 26, 22, 23, 23, 23, and 25 respectively and are therefore rejected using the same art and rationale set forth above.

*Response to Arguments*

13. Applicant's arguments with respect to claims 1–20 have been considered but are moot in view of the new ground(s) of rejection.

14. With respect to applicant's statement under 37 C.F.R. 1.111, Examiner has considered the position of the applicant and finds its remarks to be sufficient in terms of submission requirements.

15. With respect to applicant's request for affidavits under 37 C.F.R. 1.104, Examiner has considered the request. The passage relied upon by applicant applies to the situation in which the examiner has relied upon personal knowledge in making a prior art rejection of the claimed subject matter. This passage has no application to classification selection, which is an internal matter decided by USPTO officials.

*Conclusion*

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Ford, et al., U.S. Patent No. 6,963,867 [hereinafter Ford]. (see attached PTO-892, 4/30/07, reference B)

B. Sutcliffe et al., U.S. Patent No. 6,249,282 [hereinafter Sutcliffe]. (see attached PTO-892, 4/30/07, reference C)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M. Pats, Esq. whose telephone number is 571-270-1363. The examiner can normally be reached on Monday through Friday, 8:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMP

Beth Van Doren  
Beth Van Doren  
Primary Examiner  
AU 3623



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/262,146	10/28/2005	Jeffrey Scott Eder	AR-77	8784
53787	7590	09/18/2007		
ASSET TRUST, INC. 2020 MALTBY ROAD SUITE 7362 BOTHELL, WA 98021			EXAMINER PATS, JUSTIN	
			ART UNIT 3623	PAPER NUMBER
			MAIL DATE 09/18/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

11/262,146

Applicant(s)

EDER, JEFFREY SCOTT

Examiner

Justin M. Pats

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-40 and 42 is/are rejected.
- 7) ☒ Claim(s) 41 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6-17-07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/17/07 has been entered. On 6/17/07, Applicant amended claims Applicant has amended claims 23–26, 28–31, and 33–36. Applicant added claims 37–41. On 7/15/07, Applicant amended claim 40 and added claim 42. Claims 1–20 remain cancelled. Amendments on 7/15/07 to the specification have also been entered.

Art Unit: 3623

*Claim Objections*

2. Claim 23 is objected to because of the following informalities: there should be a comma following each of the phrases “one or more priorities” and “one or more mission measures”.

Appropriate correction is required.



*Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Chidlovskii.

(see PTO-892, 4/30/07, reference A)

5. As per claim 21, Chidlovskii teaches a method of prioritizing search results, comprising: accessing a profile for a user (Chidlovskii, Fig. 2, ref. 50, User Profile); receiving a search query from the user (Chidlovskii, Fig. 2, ref. 102, Query); identifying a set of search result documents that match the search query (Chidlovskii, Fig. 2, ref. 80, META - Search Engine), prioritizing the set of search result documents based on the user profile (Chidlovskii, Fig. 2, ref. 124, Ranked Documents), and displaying a prioritized set of search results to the user (*id.*, see arrow of ranked documents going to the user 100; Fig. 1, refs. 114, 116), where a profile for a user further comprises a user context (Chidlovskii, col. 4, lines 19-22, "System . . . . applies a predetermined user context profile to determine the context of the search query"). This rejection also applies to the system of claim 28.

6. As per claim 22, Chidlovskii teaches the method of claim 21 as described above. Chidlovskii further teaches wherein a user is selected from the group consisting of an individual, a group, a team, a division, an organization and combinations thereof (Chidlovskii, Fig. 2, refs. 130, Community, 120, Community Manager, 100, User; col. 4, lines 58-61). This rejection also applies to the system of claim 27 and the computer program product of claim 32.

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 23–40, 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chidlovski in view of Szabo, U.S. Patent App. Pub. No. 2007/0156677. (*see* attached PTO-892, reference A)

9. As per claim 23, Chidlovskii teaches the method of claim 21 as described above. Chidlovskii does not explicitly teach wherein a user context further comprises a mission oriented user context comprised of one or more keywords, one or more priorities, one or more mission measures and one or more context layers. Szabo teaches this (Szabo, ¶ 0097, “Therefore, any such profile is acquired in a goal-dependent or context sensitive manner.”; ¶ 0352, discussing the use of concepts and keywords to find the preferences of the user) where context layers are selected from the group consisting of physical, tactical, social environment, organization, instant and combinations thereof (*id.*; ¶ 0253, discussing social environment context layer, specifically online communities). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method of Chidlovskii to include the teaching of Szabo for the benefit of focusing the scoring or ranking process so as to reflect the goals of the user, thus producing a more accurate overall result.

10. As per claim 24, Chidlovskii in view of Szabo teaches the method of claim 23 as described above. Szabo further teaches wherein a physical context layer contains information about physical status, a location and one or more performance characteristics for each of one or more user related elements (§ 0091, “The scope of the user model may include . . . physical impairments”; §0387, discussing user entering a virtual physical reality; § 0401, discussing the physical interrelation between hyperlinks. Note here that because contexts in independent claim 23 are recited in the alternative as a Markush group, any one type of context can enable the method to operate fully. Thus, Examiner has chosen to examine the social environment context and thus, there is no need to address the other types of contexts as currently claimed.). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method of Chidlovskii to include the teaching of Szabo (*see* discussion *supra* § 9)

11. As per claim 25, Chidlovskii in view of Szabo teaches the method of claim 21 as described above. Chidlovskii further teaches wherein identifying and ranking a set of search result documents that match a query further comprises: developing a plurality of indices for each of one or more context layers associated with a user context (Chidlovskii, col. 9, lines 8-20, describing the relevance formula), and identifying and prioritizing a set of search result documents using one or more of said indices (Chidlovskii, col. 9, line 20-21, “Then, documents are sorted based on their calculated rank values and presented to user”).

12. As per claim 26, Chidlovskii teaches a search engine system, comprising:  
one or more central processing units for executing programs (Chidlovskii, Fig. 2, refs. 30, 40); an

interface for receiving event messages and connecting with a plurality of data sources (Chidlovskii, Fig. 1, refs. 114, 116); and a search engine module executable by the one or more central processing units (Chidlovskii, Fig. 2, ref. 80), the module comprising instructions for performing a search ranking method, the method steps comprising: aggregating a plurality of user-related data from a plurality of data sources ("The API or the wrapper generates "meta-data" which is used by the profilers to construct and to incrementally update the user and community profiles from the set of documents relevant to the user and in the context of the community."); developing a profile for a user using at least a portion of said data (*id.*), receiving a search query from the user (Chidlovskii, Fig. 2, ref. 102, Query), and identifying and prioritizing a set of search result documents that match the search query (Chidlovskii, Fig. 2, ref. 80, META - Search Engine, ref. 124, Ranked Documents); and displaying a set of prioritized search results using an electronic display where a profile for a user further comprises a user context that is used to prioritize the set of search result documents. (*id.*, see arrow of ranked documents going to the user 100; Fig. 1, refs. 114, 116. See also discussion *supra* ¶ 9). Chidlovskii does not explicitly teach the user context being "mission-oriented" where a *mission-oriented* user context further comprises one or more mission measures and a plurality of context layers. Szabo teaches this (see discussion *supra* ¶ 9). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method of Chidlovskii to include the teaching of Szabo (*id.*).

13. Claim 27 recites substantially similar limitations to claim 22 and is therefore rejected using the same art and rationale set forth above.

14. As per claim 28, Chidlovskii in view of Szabo teaches the search engine of claim 26 as described above. Szabo further teaches wherein each of one or more mission measures further comprise any quantifiable measure (Szabo, ¶ 0255, discussing quantifiable measurement techniques; *see also* ¶ 0406). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method of Chidlovskii to include the teaching of Szabo (*see discussion supra* ¶ 9).

15. Claim 29 recites substantially similar limitations to claim 23 and is therefore rejected using the same art and rationale set forth above.

16. As per claim 30, Chidlovskii in view of Szabo teaches the search engine of claim 29 as described above. Szabo further teaches wherein a tactical context layer contains information about user related actions, procedures, priorities, commitments and events (Szabo, ¶ 0090, User Modeling; ¶ 0094–95. Moreover, since Examiner has not chosen tactical context layer for examination, this limitation does not effectively further limit the claim. *See discussion supra* ¶ 10, regarding applicant's use of alternative language and Examiner's choice of the 'social environment' context layer). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method of Chidlovskii to include the teaching of Szabo (*see discussion supra* ¶ 9).

17. Claims 31 and 32 recite substantially similar limitations to claims 26 and 22 respectively

and are therefore rejected using the same art and rationale set forth above.

18. As per claim 33, Chidlovskii in view of Szabo teaches the computer program product of claim 31, where a user context further comprises a mission oriented user context comprised of one or more mission measures and a plurality of context layers that include an organization context layer where an organization context layer includes information about the inter-relationship between factors, elements and actions associated with the user (§ 0291–93. Moreover, since Examiner has not chosen organization context layer for examination, this limitation does not effectively further limit the claim. See discussion *supra* § 10, regarding applicant's use of alternative language and Examiner's choice of the 'social environment' context layer). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method of Chidlovskii to include the teaching of Szabo (*see* discussion *supra* § 9).

19. Claims 34, 35, and 36 recite substantially similar limitations to claims 23, 28, and 25 respectively and are therefore rejected using the same art and rationale set forth above.

20. As per claim 37, Chidlovskii in view of Szabo teaches the computer program product of claim 31 as described above. As per the purported limitations of claim 31—wherein an instant context layer further comprises information about a short-term impact of each of one or more actions, a short term impact of each of one or more events and an expected short term impact of each of one or more of commitments—Examiner has not chosen instant context layer for

examination. Thus, this limitation does not effectively further limit the claim. See discussion *supra* ¶ 10, regarding applicant's use of alternative language and Examiner's choice of the 'social environment' context layer).

21. Claim 38 recites substantially similar limitations to claim 26 and is therefore rejected using the same art and rationale set forth above.

22. As per claim 39, Chidlovskii in view of Szabo teaches the method of claim 38 as described above. Szabo further teaches wherein a set of social environment information further comprises information about factors in the social environment in which the user is completing actions (*see* discussion *supra* ¶ 9). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method of Chidlovskii to include the teaching of Szabo (*id.*).

23. Claims 40 and 42 recite substantially similar limitations to claims 26 and 23 respectively and are therefore rejected using the same art and rationale set forth above.



***Response to Arguments***

24. Applicant's arguments filed 7/15/07 have been fully considered but they are not persuasive. Applicant states that Chidlovski does not teach a profile for a user that comprises a user context. However, this limitation is explicitly taught by Chidlovskii at col. 4, lines 19-22, "System . . . . applies a predetermined user context profile to determine the context of the search query". Examiner further notes that applicant has not set forth in its specification the requisite clarity, deliberateness and precision so as to trigger special definitions for user context. "The patentee's lexicography must, of course, appear 'with reasonable clarity, deliberateness, and precision' before it can affect the claim." *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1249, 48 USPQ2d 1117, 1121 (Fed. Cir. 1998) citing *In re Paulsen*, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994). Thus, Examiner has reasonably interpreted these terms to include verbatim usage of the term within the search query relevance and ranking field of invention.

***Allowable Subject Matter***

25. Claim 41 is objected to as being dependent upon a rejected base claim, but, dependent upon applicant's response to the request for information under 37 C.F.R. 1.105, could be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Examiner requests that Applicant respond fully to the attached request for information under 37 C.F.R. 1.105 below.

*Requirement for Information under 37 CFR 1.105*

26. The following is a quotation of 37 C.F.R. 1.105:

(a)(1) In the course of examining or treating a matter in a pending or abandoned application filed under 35 U.S.C. 111 or 371 (including a reissue application), in a patent, or in a reexamination proceeding, the examiner or other Office employee may require the submission, from individuals identified under § 1.56(c), or any assignee, of such information as may be reasonably necessary to properly examine or treat the matter, for example: . . . (vii) In Use : Identification of any use of the claimed invention known to any of the inventors at the time the application was filed notwithstanding the date of the use.

Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application:

Applicant has included in his recitation of claim 41 a formula defining relevance for a word in a search query:

$$\text{SQRT}(N \cdot (nm' - n'm)) / \text{SQRT}((n+n')(n+m)(n'+m')(m+m'))$$

where N is the total number of phrases,  
where n is the number of relevant phrases where the word appears,  
where n' is the number of irrelevant phrases where the word appears,  
where m is the number of relevant phrases where the word does not appear,  
where m' is the number of irrelevant phrases where the word does not appear, and  
where a relevant phrase is a phrase that contains one or more keywords.

Examiner requests that Applicant provide all known information as to the source of this formula—for example, whether it was taken from a textbook, printed publication, or other form

Art Unit: 3623

of prior art, or whether it was derived solely by the applicant and is thus considered his own work.

Applicant is reminded that failure to fully reply to this requirement for information will result in a holding of abandonment.

The applicant is also reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained may be accepted as a complete reply to the requirement for that item.

This requirement is an attachment of the enclosed Office action. A complete reply to the enclosed Office action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action.

TMP  
9-14-07

*Conclusion*

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Turnbull et al., U.S. Patent App. Pub. No. 2002/0103789. (*see* attached PTO-892, reference B)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M. Pats whose telephone number is 571-270-1363. The examiner can normally be reached on Monday through Friday, 8:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Justin M. Pats/



TARIQ R. HAFIZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

<b>Notice of References Cited</b>	Application/Control No. 11/262,146	Applicant(s)/Patent Under Reexamination EDER, JEFFREY SCOTT	
	Examiner Justin M. Pats	Art Unit 3623	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2007/0156677	07-2007	Szabo, Andrew	707/005
*	B	US-2002/0103789	08-2002	Turnbull et al.	707/3
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
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	O					
	P					
	Q					
	R					
	S					
	T					

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

**Complete if Known**

Application Number	11/262,146
Filing Date	10/28/05
First Named Inventor	Jeff S. Eder
Art Unit	3623
Examiner Name	Justin Pats
Attorney Docket Number	AR - 77

Sheet	4	of
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## U. S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

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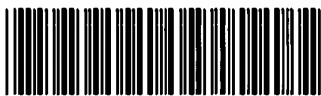
Examiner Signature	/Justin Pats/	Date Considered	09/12/2007
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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<b>Index of Claims</b> 	<b>Application/Control No.</b> 11262146	<b>Applicant(s)/Patent Under Reexamination</b> EDER, JEFFREY SCOTT
	<b>Examiner</b> Pats, Justin M	<b>Art Unit</b> 3623


✓	<b>Rejected</b>
=	<b>Allowed</b>

-	<b>Cancelled</b>
÷	<b>Restricted</b>

N	<b>Non-Elected</b>
I	<b>Interference</b>


A	<b>Appeal</b>
O	<b>Objected</b>

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<b><i>Index of Claims</i></b>  	<b>Application/Control No.</b>  11262146	<b>Applicant(s)/Patent Under Reexamination</b>  EDER, JEFFREY SCOTT
	<b>Examiner</b>  Pats, Justin M	<b>Art Unit</b>  3623

✓	<b>Rejected</b>	-	<b>Cancelled</b>	N	<b>Non-Elected</b>	A	<b>Appeal</b>
=	<b>Allowed</b>	÷	<b>Restricted</b>	I	<b>Interference</b>	O	<b>Objected</b>

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<b>Search Notes</b> 	<b>Application/Control No.</b> 11262146	<b>Applicant(s)/Patent Under Reexamination</b> EDER, JEFFREY SCOTT
	<b>Examiner</b> Pats, Justin M	<b>Art Unit</b> 3623

SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
See attached EAST search	9/14/2007	JP
See attached Google Scholar search	9/14/2007	JP

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

# EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Phrals	Time Stamp
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L6	4	2 and context and profile and (mission goal objective purpose) and (rank rating rate scor\$3 grade)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2007/09/14 14:42
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S16	10	S13 and context and search and layer <i>v</i>	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2007/09/13 13:01

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S22	6	("5855015" "6067552" "6256633" "6810395" "6963867").PN. OR ("7089237").URPN.  ab	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/13 13:15
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S27	2	("6189002").PN.  ab	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	OFF	2007/09/13 13:59



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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11/262,146

10/28/2005

Jeffrey Scott Eder

AR-77

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EXAMINER

PATS, JUSTIN

ART UNIT

PAPER NUMBER

3623

MAIL DATE

DELIVERY MODE

04/01/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	11/262,146		EDER, JEFFREY SCOTT	
	<b>Examiner</b>		<b>Art Unit</b>	
	JUSTIN M. PATS		3623	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2007 and 17 December 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 21-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12-17-07</u> .  | 6) <input type="checkbox"/> Other: _____                          |



**DETAILED ACTION**

***Notice to Applicant***

1. The following is a non-final office action. In response to Examiner's communication of 9/18/07, Applicant, on 12/7/07, amended claims 21, 23, 25, 26, 31–38, 40–42. Applicant also added claim 43. Applicant further amended the specification on 12/17/07; these amendments have been entered. Claims 21–43 are pending in this application and have been rejected below. Information Disclosure Sheet filed 12/17/07 has been considered.

***Response to Requirement and Amendment***

2. Applicant's submission of 12/17/07 regarding the requirement for information under 37 C.F.R. 1.105 is noted.

3. The objection to claims 23 and 41 are hereby removed in light of Applicant's amendments of 12/7/07 and remarks of 12/17/07 respectively.

***Allowable Subject Matter***

4. The indicated allowability of claim 41 is withdrawn in view of the newly discovered reference(s) supplied by Applicant on 12/17/07 regarding the relevance formula at issue.  
Rejection based on the newly cited reference(s) follow.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 21–22, and 38–39 are rejected under 35 U.S.C. 102(b) as being anticipated by Gauch and Pretschner, *Ontology Based Personalized Search*, Proceedings of the 11<sup>th</sup> IEEE Conference on Tools with Artificial Intelligence, Chicago, IL, 11/9/99–11/11/99 [hereinafter Gauch]. (*see* attached PTO-892, page 1, reference U).

7. As per claim 21, Gauch teaches a computer implemented method of prioritizing search results, comprising: collecting and preparing data and documents from a plurality of data sources, including user related data, external data and Web data for use in processing (pg. 1, Introduction, "Search engines index millions of documents on the Internet and allow users to enter keywords to retrieve documents that contain these keywords"), developing a context for a user that identifies a relative importance of one or more elements and one or more external factors to the user by analyzing the user related data and documents (pg. 2, 4. User Profiles, pg. 3, Creation and Maintenance), receiving a search query and one or more keywords from the user (pg. 5, Improving Search Results, "when entering a query into a search engine such as AltaVista, too many results are retrieved," "48 query results have been judged by 16 users, the judgment being either 'relevant' or 'irrelevant'"), identifying and prioritizing a set of search result

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documents that match the search query using the one or more keywords and the context (pg. 5–6, 5.1 Re-Ranking; pg. 6, 5.3 Filtering; *see also* Figs. 3–6, showing relevancy improvement percentages based on Re-ranking and Filtering), and displaying a prioritized set of search results to the user where a priority of a document is determined by a number of relevant phrases and irrelevant phrases it contains (“Filtering systems determine which documents in the results sets are relevant and which are not. This is usually done by comparing the documents to a list of keywords that describe a user or a set of documents that the user previously judged relevant or irrelevant, respectively. Good filters filter many non-relevant documents and do keep the relevant ones in the results set.”) and one or more factors selected from the group consisting of the importance to the user of the elements associated with one or more words in the document, the importance to the user of the external factors associated with one or more words in the document and combinations thereof, and where a relevant phrase is a phrase that contains one or more keywords (*id.*, pg. 1, “A system is developed that “watches over the shoulder” of a user while he is surfing the Web. A user profile is created over time by analyzing surfed pages to identify their content and by associating that content with the length of the document and the time that was spent on it. When pages about certain subjects are visited again and again, this is taken as an indication of the user’s interest in that subject.”; pg. 1, “This paper studies ways to model a user’s interests and shows how these models - also called profiles - can be deployed for more effective information retrieval and filtering.”).

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8. As per claim 22, Gauch teaches the method of claim 21 as described above. Gauch further teaches wherein a user is selected from the group consisting of an individual, a group, a team, a division, an organization and combinations thereof (pg. 1, “Presumably, information retrieval will be more effective if individual users’ idiosyncrasies are taken into account.”).

9. As per claim 38, Gauch teaches [a computer implemented method of prioritizing search results, comprising: aggregating a plurality of user-related data, external data and Web data from a plurality of data sources; developing a context for a user by analyzing the user related data, receiving a search query and one or more keywords from the user, identifying and prioritizing a set of search results that match the search query based on the user context and the one or more keywords, and displaying a prioritized set of search results to the user] (*see* discussion *supra* ¶ 7) [where a user context further comprises a mission oriented user context comprised of a set of mission context information and one or more sets of information selected from the group consisting of tactical context information, social environment information, instant impact information, physical status information, organization information and combinations thereof that identifies a relative importance of the elements and the external factors to the user] (*see* discussion *infra* ¶ 13) [where a priority of a piece of data is determined by a number of relevant phrases and irrelevant phrases it contains, the importance to the user of one or more elements associated with the one or more words in the piece of data and the importance to the user of one or more external factors associated with the one or more words in the piece of data, and where a relevant phrase is a phrase that contains one or more keywords] (*see* discussion *supra* ¶ 7).

10. As per claim 39, here that because the sets of context information in independent claim 38 are recited in the alternative as a Markush group, any one set of context can enable the method to operate fully. Thus, Examiner has not chosen to examine the social environment context, focusing on the physical, tactical, and organization and thus, there is no need to address the social environment context as currently claimed. Therefore, the claim stands rejected via the art and rationale applied to claim 38 above.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 23–24, 31–35, 37, and 40–43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gauch.

13. As per claim 23, Gauch teaches wherein a user context comprises a mission oriented user context comprising one or more priorities (pg. 3, 4.1. Creation and Maintenance, discussing the importance of particular measures in creating the user profile and evaluating user interest: “Four different combinations of time, length, and subject discriminators have been investigated. In the following discussion, *time* refers to the time a user spent on a given page, and *length* refers to the length of the page (i.e., the number of characters)”, “In terms of convergence and search result improvements (see below), two functions have shown to be superior to the other two. These superior functions . . . share the commonality of not heavily taking into account the length of a page.”) and one or more mission measures (*id.*, pg. 1, “This paper studies ways to model a user’s interests and shows how these models - also called profiles - can be deployed for more effective information retrieval and filtering.”; pg. 3, “In practice, these measures are modified to guarantee a positive interest value.”) and one or more context layers where context layers are selected from



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the group consisting of physical, tactical, social environment, organization, instant and combinations thereof (pg. 3, 4.1. Creation and Maintenance. Here there is a context layer regarding user interest based on time, length, and subject. This layer is (1) physical in nature because length refers to the physical status of the document; (2) tactical in nature because time refers to user's completed action in the form of a time commitment to a particular page; and (3) organizational in nature because subject is interrelationship based regarding the strength of match between document and category. Examiner notes that Applicant states in its specification, "It is worth noting at this point that the layers may be combined for ease of use, to facilitate processing or as organizational requirements dictate." Specification, 10/28/05, pg. 11-12).

Although Gauch focuses on an improved hierarchical structure and does not explicitly state that its user context comprises keywords (pg. 2, User Profiles, "1. hierarchically structured, and not just a list of keywords"), Gauch teaches that this technique is old and well known (pg. 2, Related Work, for example, "For each of the surfed pages a keyword vector is calculated. This page vector is compared with the keyword vectors associated with every node to calculate similarities. The nodes with the top matching vectors are assumed to be most related to the content of the surfed page. The accuracy of this text categorization algorithm was validated in [30]."). One of ordinary skill in the art would have recognized that applying the known technique of keyword analysis to Gauch's User Profile would have yielded predictable results and resulted in a more comprehensive system. The result is predictable because the level of ordinary skill in the art demonstrated by Gauch's summary of related work in the field shows the ability to incorporate such features into similar systems. Further, the addition of a keyword analysis would result in an improved system with a more robust analysis of a user's interests.

14. As per claim 24, Gauch teaches wherein a physical context layer contains information about a physical status (*see* discussion *supra* ¶ 13). Gauch does not explicitly teach the physical context layer containing a location and one or more performance characteristics for each of one or more user related elements. However, Official Notice is taken that location and performance characteristics were old and well known pieces of information used in context based data analyses. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gauch to include the teaching of Official Notice because these increasing the number of context parameters enables a more robust analysis and increases the chance of meeting mission objectives.

15. As per claim 31, Gauch teaches [aggregating a plurality of user-related data, external data and Web data from a plurality of data sources; developing a context for a user that identifies a physical status and a relative importance of one or more elements and one or more external factors to the user by analyzing the user- related data, receiving a search query from the user identifying and prioritizing a set of search results that match the search query by using the one or more keywords and the context; and displaying a set of prioritized search results using an electronic display where a priority of a piece of data is determined by the importance to the user of the elements associated with the one or more words in the piece of data and factors selected from the group consisting of a number of relevant phrases and irrelevant phrases it contains, the physical status, the importance to the user of the external factors associated with the one or more words in the piece of data and combinations thereof, and where a relevant phrase is a phrase that

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contains one or more keywords] (*see* discussion *supra* ¶ 7). Gauch does not explicitly disclose that this method is stored on a program storage device readable by a computer, tangibly embodying a program of instructions executable by at least one computer. However, Official Notice is taken that a computer readable medium comprising a computer program was old and well known in the art. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gauch to include the teaching of Official Notice because computer readable mediums store large quantities of information and are very quickly processable.

16. As per claim 32, Gauch teaches wherein a user is selected from the group consisting of an individual, a group, a team, a division, a company, an organization and combinations thereof (*see* discussion *supra* ¶ 8). As per the limitation, wherein a program storage device comprises a plurality of intelligent agents, Gauch discloses that the use of intelligent agents in is old and well known via its related work review (pg. 2, “In addition to news filtering, Amalthaea [16] explores (autonomous) personalized data discovery on the Web.”; “pg. 8, “Information discovery and filtering using multiagent evolving ecosystem. In *Proc. 1st Intl. Conf. on the Practical Application of Intelligent Agents and Multi Agent Technology*, London, 1996.”).

17. As per claim 33, Gauch teaches where a user context further comprises a mission oriented user context comprised of one or more mission measures and a plurality of context layers that includes an organization context layer (*see* discussion *supra* ¶ 13, discussing mission oriented user context; *see also infra* ¶ 25, especially rationale for rejection of a plurality of

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context layers) where an organization context layer includes information about the inter-relationship between external factors, elements and actions associated with the user (*see* discussion *supra* ¶ 13).

18. Claims 34 and 35 recite limitations that stand rejected via the art citations and rationale applied to claims 23 and 28 respectively as discussed above.

19. As per claim 37, the purported limitations—wherein an instant context layer further comprises information about a short-term impact of each of one or more actions, a short term impact of each of one or more events and an expected short term impact of each of one or more of commitments—constitute nonfunctional descriptive material and should not be given patentable weight. This description of a context layer data amounts to mere labeling of data and does not functionally alter the relevancy based search query process of claim 31. See MPEP 2106.01 [R-5]. Nonfunctional descriptive material cannot lend patentability to an invention that would otherwise have been anticipated by the prior art. When descriptive material is not functionally related to the substrate, the descriptive material will not distinguish the invention from the prior art in terms of patentability (*see In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994)).

20. Claim 40 recites limitations that stand rejected via the art citations and rationale applied to claim 31 as discussed above.

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21. As per claim 41, Gauch teaches wherein one or more keywords are used to enable an identification of a relevance and one or more associations for each of a plurality of words in a document (*see discussion supra* ¶ 7) but does not explicitly teach where a relevance for a word is identified by using the formula:  $\text{SQRT}(N * (nm' - n'm)) / \text{SQRT}((n+n')(n+m)(n'+m')(m+m'))$  where N is the total number of phrases, where n is the number of relevant phrases where the word appears, where n' is the number of irrelevant phrases where the word appears, where m is the number of relevant phrases where the word does not appear, where m' is the number of irrelevant phrases where the word does not appear, and where a relevant phrase is a phrase that contains one or more keywords. However, Applicant has admitted that this formula was publicly available at the time of invention and is thus prior art (Remarks, 12/17/07, pg. 7, citing Amini et al., *Stochastic Models for Surface Information Extractions in Texts*, ICANN 1999; pg. 892–897, pg. 893 volume 2, University of Paris, France (*see attached PTO-892, page 1, reference V*)). It would have been obvious to modify Gauch to include the teaching of admitted prior art because the known modeling techniques used by Applicant are trainable, robust, and can take into account different constraints which allow for integration with more complex information retrieval and text mining systems.

22. Claims 42 and 43 recite limitations that stand rejected via the art citations and rationale applied to claims 23 and 32, respectively, as discussed above.

23. Claims 25–30, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gauch in view of Theobald and Weikum, *The Index-Based XXL Search Engine for Querying XML Data with Relevance Ranking*, pg. 477–95, Proceedings of the 8th International Conference on Extending Database Technology: Advances in Database Technology, March 25–27, 2002 [hereinafter Theobald]. (see attached PTO-892, page 1, reference W)

24. As per claim 25, Gauch does not teach wherein identifying and prioritizing a set of search result documents that match a query further comprises: developing a plurality of indices for each of one or more context layers associated with a user context, and identifying and prioritizing a set of search result documents using one or more of said indices. Theobald teaches this in the analogous art of relevance ranking of search query documents (Theobald, pg. 484, “We use three index structures, element path index (EPI), element content index (ECI), and ontology index (OI), which are described in the subsequent subsections.”; pg. 487, Query Processing, “For each subquery, subgraphs of the data graph that match the query graph are computer, exploiting the various indexes to the best possible extent”; see also pg. 488–89, 4.3 Index-Based Subquery Evaluation). It would have been obvious to one having ordinary skill in the art to modify Gauch to include the teaching of Theobald because “ontological information and suitable index structures are used to improve the search efficiency and effectiveness.” (Theobald, Abstract)

25. As per claim 26. Gauch teaches instructions for performing a search ranking method, the method steps comprising: [aggregating a plurality of user-related data, external data and Web

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data from a plurality of data sources; developing a context for a user that identifies a physical status and a relative importance of one or more elements and one or more external factors to the user by analyzing the user-related data, receiving a search query and one or more keywords from the user, and identifying and prioritizing a set of search result documents that match the search query by using the one or more keywords and the context; and displaying a set of prioritized search results using an electronic display where a priority of a piece of data is determined by the importance to the user of the external factors associated with the one or more words in the piece of data and factors selected from the group consisting of a number of relevant phrases and irrelevant phrases it contains, the importance to the user of the elements associated with the one or more words in the piece of data, the physical status and combinations thereof, where a relevant phrase is a phrase that contains one or more keywords] (*see discussion supra* ¶ 7), and where a context for a user further comprises a mission-oriented user context comprising one or more mission measures and a context layer. (*see discussion supra* ¶ 13). Gauch does not explicitly teach a plurality of context layers. However, adding a context layer with the same functionality is considered to be the equivalent of duplicating a part for multiple effect. Mere duplication of parts has no patentable significance unless new and unexpected result is produced. See *In re Harza*, 124 USPQ 378 (CCPA 1960). Additionally, Applicant's division of readily available context information into a plurality of layers is considered the equivalent of making parts separable. Because Gauch discloses the contextual information and associate function provided by a plurality of Applicant's context layers, and constructing a formerly integral structure in various elements involves only routine skill in the art, it would have been obvious to

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one having ordinary skill in the art to modify Gauch accordingly to achieve a predictable result.

*See In re Dulberg*, 129 USPQ 348, (CCPA 1961).

As per the hardware of claim 26, Gauch teaches a search engine system (pg. 1, “Search engines index millions of documents on the Internet and allow users to enter keywords to retrieve documents that contain these keywords.”) but does not explicitly enumerate its structure of one or more central processing units for executing programs; an interface for receiving event messages and connecting with a plurality data sources; and a search engine module executable by the one or more central processing units. Theobald teaches this (pg. 490, 5. Architecture of the XXL Search Engine, Fig. 7). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gauch to include the teaching of Theobald because computerized systems are able to quickly analyze large quantities of data with relatively few errors and allow the user to guide and understand such analysis via a user interface.

26. As per claim 27, Gauch teaches wherein a user is selected from the group consisting of an individual, a group, a team, a division, a company, an organization and combinations thereof (*see* discussion *supra* ¶ 7).

27. As per claim 28, Gauch teaches wherein each of one or more mission measures further comprise any quantifiable measure (Gauch, Figs. 3–6, showing interest values relating to relevancy and irrelevancy of a search query produced document).



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28. As per claim 29, Gauch teaches wherein a plurality of context layers are selected from the group consisting of physical, tactical, social environment, instant, organization and combinations thereof (*see* discussion *supra* ¶ 13).

29. As per claim 30, Gauch teaches wherein a tactical context layer contains information about user related actions, procedures, priorities, commitments and events (*id.*).

30. Claim 36 recites limitations that stand rejected via the art citations and rationale applied to claim 25 as discussed above.

***Response to Arguments***

31. Applicant's arguments with respect to claims 21–42 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Embley et al., *Conceptual-model-based data extraction from multiple-record Web pages*, Data & Knowledge Engineering 31 (1999), pg. 227–251. (see attached PTO-892, page 1, reference X)

B. Chiang et al., *A smart web query method for semantic retrieval of web data*, Data & Knowledge Engineering 38 (2001), pg. 63–84. (see attached PTO-892, page 2, reference U)

C. Roitblat, U.S. Patent No. 6,189,002. (see attached PTO-892, page 1, reference A)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUSTIN M. PATS whose telephone number is (571)270-1363. The examiner can normally be reached on Monday through Friday, 8:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Justin M. Pats/  
Examiner, Art Unit 3623  
/Jonathan G. Sterrett/  
Primary Examiner, Art Unit 3623

<b>Notice of References Cited</b>	Application/Control No. 11/262,146		Applicant(s)/Patent Under Reexamination EDER, JEFFREY SCOTT	
	Examiner JUSTIN M. PATS		Art Unit 3623	Page 1 of 2

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,189,002	02-2001	Roitblat, Herbert L.	707/1
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Gauch and Pretschner, Ontology Based Personalized Search, Proceedings of the 11th IEEE Conference on Tools with Artificial Intelligence, Chicago, IL, 11/9/99-11/11/99
	V	Amini et al., Stochastic Models for Surface Information Extractions in Texts, ICANN 1999; pg. 892-897, pg. 893 volume 2, University of Paris, France
	W	Theobald and Weikum, The Index-Based XXL Search Engine for Querying XML Data with Relevance Ranking, pg. 477-95, Proceedings of the 8th International Conference on Extending Database Technology: Advances in Database Technology, March 25-27, 2002
	X	Embley et al., Conceptual-model-based data extraction from multiple-record Web pages, Data & Knowledge Engineering 31 (1999), pg. 227-251

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<b>Notice of References Cited</b>	Application/Control No. 11/262,146	Applicant(s)/Patent Under Reexamination EDER, JEFFREY SCOTT	
	Examiner JUSTIN M. PATS	Art Unit 3623	Page 2 of 2

**U.S. PATENT DOCUMENTS**

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	A	US-			
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	J	US-			
	K	US-			
	L	US-			
	M	US-			

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	N					
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	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Chiang et al., A smart web query method for semantic retrieval of web data, Data & Knowledge Engineering 38 (2001), pg. 63-84
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/360,087	02/23/2006	Jeffrey Scott Eder	AR - 83	8881
53787 7590 06/27/2007 ASSET TRUST, INC. 2020 MALTBY ROAD SUITE 7362 BOTHELL, WA 98021			EXAMINER COLBERT, ELLA	
			ART UNIT 3694	PAPER NUMBER
			MAIL DATE 06/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

11/360,087

Applicant(s)

EDER, JEFFREY SCOTT

Examiner

Ella Colbert

Art Unit

3694

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/01/06 & 3/11/07
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_



### DETAILED ACTION

1. Claims 1-20 are pending in the instant application.
2. The IDS filed 5/01/06 and the IDS filed 3/11/07 has been considered and entered.

### *Abstract*

3. The Abstract of the disclosure is objected to for the following: The abstract is not descriptive and long enough.

Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 3, 4, 7, 8, 9, 13, 15, 18, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 in the preamble recites "risk method comprising:". This is vague and indefinite as to what "risk method". Also claim 1 is indefinite because the metes and bounds of the claim cannot be determined as written. Suggestion for clarity: "An enterprise risk management method, comprising: aggregating data ...; identifying a

plurality ...; completing a series of tasks ..; identifying an optimal ...; identifying an optimal mode ...; and reporting ...”.

Claims 3, 4, 7, 8, 13-15, 18, and 20 have a similar problem.

Claims 2-7, 9-14, and 16-19 are also rejected because of their dependency from a rejected base claim.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1-20 are rejected under 35 U.S.C. 101 due to a lack of a tangible result.

Under the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, and eligible invention either “physically transforms an article or physical object to a different state or thing, or ... produces a useful, concrete and tangible result.” If a claim is not directed to an article of physical object, then a relevant test for eligibility is whether the claimed invention as a whole is limited to a useful, concrete, and tangible result.

The MPEP 2106 IV C (2) gives guidance to judge whether a result is useful, tangible and concrete.

Claims 1-20 recite liabilities, insurance policy transactions, and measuring identified risks which can be on paper, which does not make it statutory. Thus, these recitations comprise “nonfunctional descriptive material. “Nonfunctional descriptive

Art Unit: 3694

material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.


### Inquiries

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ella Colbert whose telephone number is 571-272-6741. The examiner can normally be reached on Monday, Wednesday, and Thursday, 5:30AM-3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 571-272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 25, 2007

  
ELLA COLBERT  
PRIMARY EXAMINER

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(Use as many sheets as necessary)*

### Complete if Known

Application Number	11/360,087
Filing Date	2/23/2006
First Named Inventor	Jeff S. Eder
Art Unit	3694
Examiner Name	Ella Colbert
Attorney Docket Number	AR - 83

Sheet \_\_\_\_\_ of \_\_\_\_\_

## U. S. PATENT DOCUMENTS

[illegible]

**FOREIGN PATENT DOCUMENTS**

[illegible]

Examlner  
Signature

E. Palmer

Date  
Cons

Considered

6-18-87

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use as many sheets as necessary)		Application Number	11/360,087
		Filing Date	02/23/2006
		First Named Inventor	Jeff S. Eder
		Att. Unit	
		Examiner Name	
Sheet 1 of 1	Attorney Docket Number	AR - 83	

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if any)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
<i>JE</i>		US- 5,224,034 - B1	06-29-1993	Katz, Paul	
		US- 5,237,946 - B1	08-17-1993	Kagami, Akari	
		US- 5,128,861 - B1	07-07-1992	Kagami, Akari	
		US- 5,237,495 - B1	08-17-1993	Moril, Hideki	
		US- 3,749,892 - B1	07-31-1973	Stenning, Patrick	
		US- 6,361,201 - B1	11-01-1994	Jost, Allen et al.	
		US- 3,933,305 - B1	01-20-1976	Murphy, John Michael	
		US- 4,989,141 - B1	01-29-1991	Lyons, Richard	
		US- 5,317,504 - B1	05-31-1994	Nakayama, Mamoru	
		US- 5,414,621 - B1	05-09-1995	Hough, John	
		US- 5,193,055 - B1	03-09-1993	Brown, Gordon	
		US- 5,609,282 - B1	09-15-1998	Cooper, Dennis	
		US- 5,875,431 - B1	02-23-1999	Hackman et al.	
		US- 5,737,581 - B1	04-07-1998	Keane, John	
		US- 5,812,888 - B1	09-22-1998	Sandretto, Michael	
		US- 6,125,355 - B1	09-26-2000	Bekaert et al.	
		US- 6,173,276 - B1	01-19-2001	Kant, Elaine	
		US- 6,112,188 - B1	08-29-2000	Harnett, William	
<i>JE</i>		US- 6,134,536 - B1	10-17-2000	Shepherd, Ian	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>2</sup> Number <sup>3</sup> Kind Code <sup>4</sup> (if any)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear
		EP 0 587 290 A2	03-16-1994	Powers et al.	
		GB 2 253 081 A	02-19-1992	Kaisha, Kabushi	
		WO 98 38 588	02-28-1997	Mayon and White	

Examiner Signature <i>J. Eder</i>	Date Considered <i>6-18-07</i>
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\*EXAMINER: Circle a reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 801.04. <sup>3</sup> Enter Office Unit issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

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Sheet 3

of

Application Number	11/360,087
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Filing Date	02/23/2006
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
First Named Inventor	Jeff S. Eder
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Art Unit

Examiner Name \_\_\_\_\_

Attorney Docket Number	AR - 83
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**U. S. PATENT DOCUMENTS**

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Examiner Initials*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number Kind Code <small>2 or more</small>				
	US	6,332,163 - B1	12-18-2001	Bowman-Amuah, Michel		
	US	5,802,501 - B1	9-1-1998	Graff, Richard A.		
	US	4,839,304 - B1	6-13-1989	Roberts et al		
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	US	2002/0023034-A1	02-21-2002	Brown et al		
	US	2002/0052820-A1	05-02-2002	Gatto, Joseph		
	US	2002/0002520-A1	01-03-2002	Gatto, Joseph		
	US	2002/0016758-A1	02-07-2002	Grigsby, Calvin		
	US	6,189,011 - B1	2-13-2001	Lim et al.		
	US	6,209,124 - B1	3-27-2001	Vermeire et al.		
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	US	6,282,531 - B1	8-28-2001	Haughton et al.		
	US	6,738,753 - B1	5-18-2004	Hogan, Michael		
	US	5,774,873 - B1	03-29-1998	Berent, Thomas		
	US	5,794,219 - B1	08-11-1998	Brown, Stephen		
	US	5,668,591 - B1	03-29-1995	Shintani, Peter		
		US	20030083973-A1	5-1-2003	Horsfall, Peter	

## FOREIGN PATENT DOCUMENTS

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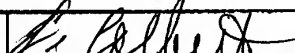
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)	Application Number	11/360,087
	Filing Date	02/23/2006
	First Named Inventor	Jeff S. Eder
	Art Unit	
	Examiner Name	
Sheet <span style="border: 1px solid black; display: inline-block; width: 50px; height: 15px;"></span> of <span style="border: 1px solid black; display: inline-block; width: 50px; height: 15px;"></span>	Attorney Docket Number	AR - 83

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Examiner Initials*	Cite No.*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	ZIPP, ALAN S.; Business valuation methods; 1993, AICPA	
	2	DAVIDOW, WILLIAM; Accounting systems are completely wrong, January 1995, Red Herring	
	3	MCTAGGERT, JAMES, KONTES, PETER AND MANKINS, MICHAEL, The value imperative, 1994, The Free Press	
	4	RAPPAPORT, ALFRED; Creating shareholder value; 1986, The Free Press	
	5	RITCHKEN, PETER, Options, Theory, Strategy and Applications, 1987, Foresman and Company	
	6	OIXIT, AVINASH & PINDYCK, ROBERT; Investment under uncertainty; 1994; Princeton University Press	
	7	GARSON, DAVID; Interpreting neural network connection weights, 4/1/1991, AI Expert	
	8	WELLSTEAD, STEPHEN; Neural network and fuzzy logic applications in C/C++; 1994; John Wiley & Sons	
	9	MOST, KENNETH; Accounting theory; 1977, Gird, Inc.	
	10	HENDRIKSEN, ELDEN, Accounting theory, 1982, Richard D. Irwin	

Examiner Signature 	Date Considered <b>6-18-07</b>
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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		Application Number	11/360,087
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		Art Unit	
		Examiner Name	
Sheet		Attorney Docket Number	AR - 83

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	11	KULKARNI, ARUN; Artificial neural networks for image understanding; 1/1/1994; Van Norstrand Reinhold	
	12	WARD SYSTEMS GROUP; NeuroWindows User Manual; 1993; Wards Systems Group	
	13	BREALEY, RICHARD & MYERS, STEWART; Principles of Corporate Finance; 1991; McGraw Hill	
	14	FAULKNER, TERRENCE; Applying options thinking to R&D valuation; 5/1/1996; Research Technology Manage	
	15	MILLER, MERTON & MODIGLIANI, FRANCO. Dividend policy, growth and the valuation of shares, 10/1/1961.	
	16	SIMENSKY, MELVIN & BRYER, LANNING; The new role of intellectual property in commercial transactions,	
	17	WILSON, ALBERT. Emerging approaches to impaired property valuation, 4/1/1996, Appraisal Journal, v64	
	18	BROWN, GORDON T. Free cash flow appraisal, a better way, 4/1/1996, Appraisal Journal, v64, number 2.	
	19	BUSINESS EDITORS & REAL ESTATE INDUSTRY WRITERS. EOK Realty Investors I, 4/2/1992, Press Release	
	20	SWAD, RANDY. Business valuation, applicable standards for CPA's, 9/1/1995, CPA Journal v65, number 9	

Examiner Signature <i>[Signature]</i>	Date Considered <i>6-18-07</i>
---------------------------------------	--------------------------------

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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**Complete If Known**

Application Number	11/360,087
Filing Date	02/23/2006
First Named Inventor	Jeff S. Eder
Art Unit	
Examiner Name	
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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	21	REILLY, ROBERT; Valuation of intangibles for bankruptcy and reorganization purposes; 8/1/1994; Ohio	
	22	LIEBICH, KIM; How to value a bank; 8/1/1995; ABA Banking Journal	
	23	BAUMANN, BARBARA H & OXAAL, MARJORIE R; Estimating the value of a group medical practice, a primer.	
	24	MAXSON, MARK; Will you get your money's worth?; 5/1/1993, Financial Executive	
	25	FRIEDMAN, RICHARD; Business valuation: calculating it right; 10/1/1994; Practical Accountant	
	26	MULLEN, MAGGIE; How to value intangibles; 11/1/1993; Accountancy	
	27	STEWART, THOMAS; Trying to grasp the intangible; 10/2/1995 Fortune	
	28	OUROSOFF, ALEXANDRA; What the world's top brands are worth; 9/1/1992; Finance World	
	29	PHILLIPS BUSINESS INFORMATION, INC.; Five ways to reduce risk with neural networks; 9/27/1993; Credit	
	30	LIPPITT, JEFFREY & MASTRACCHIO, NICHOLAS; Developing capitalization rates for valuing a business. 11	

Examiner Signature: <i>[Signature]</i>	Date Considered: 6-18-07
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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**


(Use as many sheets as necessary)

**Complete if Known**

Application Number	11/360,087
Filing Date	02/23/2006
First Named Inventor	Jeff S. Eder
Art Unit	
Examiner Name	
Attorney Docket Number	AR - 83

Sheet ☐ of ☐

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	31	HIRSCH, A. ETHAN, What's it worth?, 12/21/1992, Accounting Today, v6, number 24, p 16	
	32	MYERS, STEWART & HOWE, CHRISTOPHER; A life-cycle financial model of Pharmaceutical R&D; 4/1/1997; MIT	
	33	SIMON, CAROL J. & SULLIVAN, MARY W.; The Measurement and Determinants of Brand Equity; 10/1/1993; Ma	
	34	Sveiby, Karl Erik & Mellander, Klas; Tango Learning Guide Version 2.1; 1994; Celami	
	35	KAUFMAN, J. JERRY; Value Management; 1998; Crisp	
	36	HBS Press; Measuring Corporate Performance; 1998; HBS Press	
	37	KAPLAN, ROBERT & NORTON, DAVID; The Balanced Scorecard; 1996; HBS Press	
	38	MORRIS, HENRY; Extending the Business Process, 10/6/98, IDC Presentation	
	39	AMIR, ELI; & LEV, BARUCH, "Value-relevance of non-financial information", Journal of Accounting and	
	40	ERNST & YOUNG, Measures that Matter	

Examiner Signature		Date Considered	6-18-07
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<sup>1</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Substitute for form 1449/PTO		<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	11/380,087	
		Filing Date	02/23/2006	
		First Named Inventor	Jeff S. Eder	
		Art Unit		
		Examiner Name		
Sheet		of	Attorney Docket Number	AR - 83

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	41	BOUQUET, PAOLO, SEARAFINI, LUCIANO, et al; Modeling and Using Context - Context 99, 09/99, Springer	
	42	AKMAN, VAROL, BOUQUET, PAOLO, et al; Modeling and Using Context - Context 2001, 07/01, Springer	
	43	KUEHNE, SVEN, et al, "SEQL: Category learning as progressive abstraction using structure mapping", 2	
	44	FRANKE, JURGEN, HARDLE, WOLFGANG, et al; Measuring Risk in Complex Stochastic Systems, 2000, Springer	
	45	SHIMPI, PRAKASH, Integrating Corporate Risk Management, 10/99, Swiss Re New Markets	
	46	BREWKA, GERHARD, Principles of Knowledge Representation, 1996, CSLI Publications	
	47	REITER, RAYMOND, Knowledge In Action, 2001, MIT Press	
	48	TISSSEN, RENE, ANDRIESEN, DANIEL, et al; The Knowledge Dividend, 2000, Prentice Hall	
	49	BROWN, JOHN SEELY, et al, "Loosening up: How process networks unlock the power of specialization", 20	
	50	BLYTHE, JIM, "An Integrated Environment for Knowledge Acquisition", 2001, Intelligent User Interface	

Examiner Signature	<i>[Signature]</i>	Date Considered	6-18-07
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Substitute for form 1449/PTO

**Complete if Known**

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)	Application Number	11/360,087
	Filing Date	02/23/2006
	First Named Inventor	Jeff S. Eder
	Art Unit	
	Examiner Name	
Sheet <input type="checkbox"/> of <input type="checkbox"/>	Attorney Docket Number	AR - 83

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<i>McKinsey</i>	51	KOLLER, TIMOTHY, "What is value based management", McKinsey Quarterly, 1994, Number 3	
	52	BROWN, CAROL; COAKLEY, JAMES; PHILLIPS, MARY ELLEN, "Neural Networks Enter World of Mgmt Accounting,	
	53	BIELINSKI, DANIEL, "How to sort out the premium drivers of post deal value", Mergers & Acquisitions,	
	54	BERGSTROM, PETER; KIMBER, ELIOT, "Formal data models for SGML and HyTime", SGML, March 1999, electrum	
	55	HAROLD, ELLIOTTE - XML Bible, IDG Books, 1999	
	56	KNIGHT, JAMES, Value Based Management, McGraw Hill, 1996	
	57	NeuroSolutions, Application Summaries	
	58	COPELAND, TOM; KOLLER, TIM; MURRIN, JACK, Valuation, John Wiley and Sons, 1994	
	59	BROWN, CAROLYN; PHILLIPS, MARY ELLEN, Expert Systems for Management Accounting Tasks, IMA Foundation	
	60	Anonymous, "Survey: Too Clever by Half", The Economist, January 24, 2004	

Examiner Signature	<i>E. Colbert</i>	Date Considered	6-18-07
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		Application Number	11/380,087	
		Filing Date	02/23/2006	
		First Named Inventor	Jeff S. Eder	
		Art Unit		
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Sheet		of	Attorney Docket Number	AR - 83

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J. Eder	61	Culp, Christopher et al, "Value at Risk for Asset Managers", Derivatives Quarterly, Vol 5, 04/8/99	
	62	Chicago Mercantile Exchange, "SPAN - Frequently Asked Questions", CME web site, 2/17/2006	
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	66	GOLDFARB, CHARLES; & PRESCOD, PAUL; XML Handbook; Prentice Hall, 1998	
	66	MAIER, DAVID; "Database Desiderata for an XML Query Language"; W3.org, 1998	
	67	WIDOM, JENNIFER, "Data Management for XML, Research Directions", IEEE, July 1999	
	68	Chambers, Robert; Quiggins, John; "Resource Allocation and Asset Pricing", November 2002	
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	70	Barua, Anilash; Lee, C.H. Sophie; Whinston, Andrew, "The Calculus of Reengineering", August 1994	

Examiner Signature	<i>[Signature]</i>	Date Considered	6-18-07
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number:	11/360,087	
		Filing Date	02/23/2006	
		First Named Inventor	Jeff S. Eder	
		Art Unit		
		Examiner Name		
Sheet		of	Attorney Docket Number	AR - 83

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<i>M. J. Eder</i>	71	KLUGE, JURGEN, STEIN, WOLFRAM, LIGHT, THOMAS, Knowledge Unplugged, 2001, Palgrave	
	72	QUINN, JAMES BRIAN, Intelligent Enterprise, Free Press, 1992	
	73	FOWLER, MARTIN, Analysis Patterns: Reusable Object Models, 1997, Addison-Wesley	
	74	SHAFFER, GLENN & VOYK, VLADIMIR, Probability and Finance, 2001, John Wiley & Sons	
	75	FAHY, MARTIN, Strategic Enterprise Management Systems, 2001, CIMA	
	76	CAQUETTE, JOHN, ALTMAN, EDWARD & NARAYANAN, PAUL, Managing Credit Risk, John Wiley and Sons, Inc.	

Examiner Signature	<i>[Signature]</i>	Date Considered	6-18-07
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# Index of Claims



Application/Control No.

11/360,087

Examiner

Ella Colbert

Applicant(s)/Patent under Reexamination

EDER, JEFFREY SCOTT

Art Unit

3694

✓	Rejected
=	Allowed

—	(Through numeral) Cancelled
+	Restricted

N	Non-Elected
I	Interference

A	Appeal
O	Objected

Claim		Date											
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**Search Notes**

Application/Control No.

11/360,087

Examiner

Ella Colbert

Applicant(s)/Patent under  
Reexamination

EDER, JEFFREY SCOTT

Art Unit

3694

**SEARCHED**

Class	Subclass	Date	Examiner

**INTERFERENCE SEARCHED**

Class	Subclass	Date	Examiner

**SEARCH NOTES  
(INCLUDING SEARCH STRATEGY)**

	DATE	EXMR
WEST Search (See attachments.)	6/20/2007	EC



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Bib Data Sheet

CONFIRMATION NO. 8881

<b>SERIAL NUMBER</b> 11/360,087	<b>FILING OR 371(c) DATE</b> 02/23/2006 <b>RULE</b>	<b>CLASS</b> 705	<b>GROUP ART UNIT</b> 3694	<b>ATTORNEY DOCKET NO.</b> AR - 83	
<b>APPLICANTS</b> Jeffrey Scott Eder, Mill Creek, WA: <i>Verified JC</i> <b>** CONTINUING DATA **</b> This application is a CON of 10/329,172 12/23/2002 which is a CIP of 09/688,983 10/17/2000 <b>** FOREIGN APPLICATIONS **</b> <i>Verified JC</i> <b>IF REQUIRED, FOREIGN FILING LICENSE GRANTED** SMALL ENTITY **</b> <b>** 03/22/2006</b>					
Foreign Priority claimed <input type="checkbox"/> yes <input checked="" type="checkbox"/> no 35 USC 119 (a-d) conditions <input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Met after met Verified and Acknowledged <i>Allowance</i> Examiner's Signature <i>[Signature]</i> Initials <i>JC</i>		<b>STATE OR COUNTRY</b> WA	<b>SHEETS DRAWING</b> 7	<b>TOTAL CLAIMS</b> 20	<b>INDEPENDENT CLAIMS</b> 4
<b>ADDRESS</b> 53787					
<b>TITLE</b> Enterprise risk management system					
<b>FILING FEE RECEIVED</b> 600	<b>FEES: Authority has been given in Paper</b> No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees ( Filing ) <input type="checkbox"/> 1.17 Fees ( Processing Ext. of time ) <input type="checkbox"/> 1.18 Fees ( Issue ) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit		



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/386,587	02/23/2006	Jeffrey Scott Eder	AR - S3	8881

53787 7590 11-01-2007  
ASSET TRUST, INC.  
2020 MALTBY ROAD  
SUITE 7362  
BOTHELL, WA 98021

EXAMINER
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COLBERT, ELLA

ART UNIT	PAPER NUMBER
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5694

MAIL DATE	DELIVERY MODE
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11/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

11/360,087

Applicant(s)

EDER, JEFFREY SCOTT

Examiner

Ella Colbert

Art Unit

3694

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1-20 are pending. Claims 1, 19, and 20 have been amended in this communication filed 7/01/07 entered as Response After Non-Final Action.
2. The objection to the abstract has been overcome by the Applicant's submission of a new abstract and is hereby withdrawn.
3. The 35 USC 112, second paragraph rejections for claims 1, 3, 4, 7-9, 13, 15, 18, and 20 have been overcome in the prior Office Action by Applicant's amendment to the claims and are hereby withdrawn. However, there are still remaining 35 USC 112, second paragraph rejections as set forth here below.
4. The 35 USC 101 rejection still remains and is being expanded in this Office Action as set forth here below.

### ***Claim Objections***

5. Claims 1 and 15 are objected to because of the following informalities: Claim 1, page 2, line 4 recites "more external factors on an enterprise financial ...". This line should recite "more external factors on an enterprise's financial ...". Claim 15, page 5, line 2 recites "A program storage device readable by machine, tangibly embodying ...". This line would be better written as "A program storage device readable by a machine, tangibly embodying ...". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "... measuring a plurality of risks that may have an impact on a financial ...". The use of the term "may" is not a positive recitation in the claim because "may" does not mean that the risks will have an impact on a financial ...".

***Claim Rejections - 35 USC § 101***

8. Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-20 are drawn to a method and computer readable medium for performing enterprise risk management. It is unclear how the objective of an impact, enterprise financial performance, risk, and may have an impact by the Applicants' is achieved in the claim language because the first claim limitation in claim 1 recites "... an impact, an enterprise financial performance, risks, and may have an impact. These are all abstract ideas except the "may have" which is not concrete. What is the data? This can be any data management system since the data has not been identified as to whether it is enterprise data or financial performance data or risk data. The term "measure" is indefinite and uncertain and not concrete. Management of said risk is an abstract idea and said measured risk is not statutory with so many parameters making them abstract in the claim. Where and what are the tasks? This is vague and indefinite. The inputs are not defined in the claim because the portion is not selected or identified. The part is not defined which would make it concrete. There is no concrete result. Therefore, the results cannot be relied upon. Management

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said measured risk is indefinite and abstract. Does one having ordinary skill know what is meant by Management said measured risk? As such the claimed invention is directed to a judicial exception to 35 U.S.C. §101 (i.e. an abstract idea, natural phenomenon, or law of nature) and is not directed to a practical application of such judicial exception because the claims do not require any physical transformation and the invention as claimed does not produce a useful, concrete, and tangible result.

Useful- must be specific, substantial and credible and specifically recited in the claim. If the claim is broad enough to not require a practical application, it must be rejected.

Tangible- must be some "real-world" result, not abstract.

Concrete - must have a result that can be substantially repeatable or the process must substantially produce the same result again. Claim 1 does not produce tangible results, but merely determinations. These determinations might remain entirely inside the mind of the person doing the determining. These results are not tangible, thus not eligible subject matter, thus are rejected.

Furthermore, Claims 1-20 do not necessarily affect the physical world. They lack a tangible and concrete result, and are rejected as non-statutory subject matter. The Court of Appeals for the Federal Circuit issued opinions in *State Street Bank &*

*Trust Co. v. Signature Financial Group Inc.*, 149 F. 3d 1368, 47 USPQ2d 1596 (Fed.

*Cir.* 1998) and *AT & T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 50

USPQ2d 1447 (Fed. *Cir.* 1999). These decisions explained that, to be eligible for patent protection, the claimed invention as a whole must accomplish a practical application.

That is, it must produce a "useful, concrete and tangible result." *State Street*, 149 F.3d at 1373-74, 47 USPQ2d at 1601 o2. To satisfy section 101 requirements, the claim must be for a practical application of the 101 judicial exception, which can be identified in various ways: (a) The claimed invention "transforms" an article or physical object to a



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different state or thing. (b) The claimed invention otherwise produces a useful, concrete and tangible result, based on the factors discussed below.

The USPTO's official interpretation of the utility requirement provides that the utility of an invention has to be (i) specific, (ii) substantial and (iii) credible. See MPEP § 2107.

The tangible requirement does require that the claim must recite more than a § 101 judicial exception, in that the process claim must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77 (invention ineligible because had "no substantial practical application"). It is not clear as to what tangible result is produced by implementing the steps of the claim especially since there is no guarantee that implementing the steps of the claims will result in the performance enterprise risk.

For an invention to produce a "concrete" result, the process must have a result that can be substantially repeatable or the process must substantially produce the same result again. In re Swartz, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000) (where asserted result produced by the claimed invention is "irreproducible" the claim should be rejected under section 101). The opposite of "concrete" is unrepeatable or unpredictable.

There is no useful, concrete and tangible result produced from implementing the steps of the claimed invention. The dependent claims are rejected for the same reason and by way of dependency on a rejected independent claim.

### **Inquiries**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ella Colbert whose telephone number is 571-272-6741. The examiner can normally be reached on Monday, Wednesday, and Thursday, 5:30AM-3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 571-272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 29, 2007